Notebook, N-09-05-06

5-6-09

A4 CELL #398,

Volume III.

Runs continued from Vol. II.

DATE	TIME	MIN	AMPS	VOLTS #398	TEMP #398	TEMP #312	
						Charge	166
6-6-09	11.55	0	30	1.197	83.5		
	5.55	1	"	116.	83.7		
	6.55	2	"	114.2	84		
	7.55	3	"	112.7	84		
	8.55	4	"	112.	84		
	9.55	5	"	111.	84		
	10.55	6	"	109.5	83.5		
	11.55	7	"	1.172	107.5	82	
						Discharge	166
5/7/09	AM 12.00	0	40	1.40			
	02	2	"	1.35			
	05	5	"	1.337			
	10	10	"	1.32			
	20	20	"	1.29			
	30	30	"	1.265			
	40	40	"	1.247			
	1.00	60	"	1.22	109.2	81.5	
	20	80	"	1.202			
	40	100	"	1.19			
	2.00	120	"	1.172	112.5	82	
	20	140	"	1.157			
	40	160	"	1.13			
	3.00	180	"	1.11	114.2	82	

DATE	TIME	MIN	AMPS	VOLTS #398	TEMP #398	TEMP #312	
	AM						
5/7/09	3.30	210	40	1.07			
	.32	212	"	1.05			
	.40	220	"	1.02			-152.3
	.48	228	"	1.00			
	4.00	240	"	.97	117.7	84.7	
	.18	258	"	.90			
	.40	280	"	.86			
	.50	290	"	.88			
	.55	295	"	.837			
	.58	298	"	.83	119.0	84.7	-193.7
						Charge	166
5/7	AM						
	4.55	0	"		122.5	84	
	5.55	1	"		1155	83.5	
	6.55	2	"		111	83.5	
	7.55	3	"		108	83.5	
	8.55	4	"		105	77.7	
	9.55	5	"		103	77.7	
	10.55	6	"		102.7	77	
	11.55	7	"	1.20	102.5	77	
						Discharge	166
5-7-09	PM 12.00	0	40	1.13			
	02	2	"	1.165			
	05	5	"	1.197			
	10	10	"	1.22			
	20	20	"	1.247			
	30	30	"	1.265			

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	TEMP Adder	
	PM						
5-7-09	12.40	40	40	132			
	1.00	60	"	1322	106.5	778	
	.20	80	"	128			
	.40	100	"	1275			
	2.00	120	"	123	106.5	78	
	.30	140	"	116			
	.40	160	"	114			
	3.00	180	"	1.11	112.2	78	
	.20	200	"	1.07			
	.30	210	"	1.05			
	.40	220	"	1027			
	.48	228	"	1.00			-152
	50	230	"	.995			
	4.00	240	"	.975	116.7	78.5	
	.10	250	"	.964			
	.20	260	"	.87			
	.30	270	"	.74			
	.37	277	"	.50			-184.7
			Change #	168			
	PM						
5-7-09	4.55	0	30		118	79.	
	5.55	1	"		113.	72.5	
	6.55	2	"		107.5	777	
	7.55	3	"		104.	77	
	8.55	4	"		101	765	

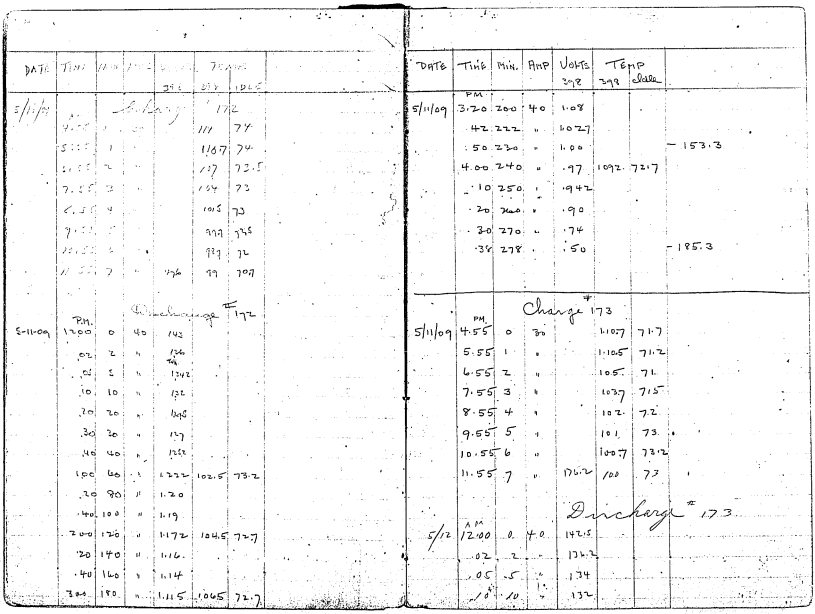
DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	TEMP Adder	
	PM						
5-7-09	9.55	5	30		100.	76.5	
	10.55	6	"		100.	765	
	11.55	7	"	175.7	106.7	76	
				Discharge			168
	AM						
5/8	12.00	0	40	141			
	.02	2	"	136			
	.05	5	"	1325			
	.10	10	"	1317			
	.20	20	"	129			
	.30	30	"	127			
	.40	40	"	125			
	1.00	60	"	122	106	76.5	
	.20	80	"	120			
	.40	100	"	119.2			
	2.00	120	"	117	106.5	76.5	
	.20	140	"	116			
	.40	160	"	1137			
	3.00	180	"	112.2	107.7	77	
	.20	200	"	103			
	.38	218	"	102.5			
	.50	230	"	101.7			
	4.00	240	"	97	113	77	-152.3
	.10	250	"	93.7			
	.20	260	"	88			
	.30	270	"	77			
	.33	273	"	83.7			
	.37	277	"	50	116	77	-184.3

DATE	TIME	MIN	AMPS	VOLTS	TEMPS	
			34V	33.5	22.5	
5/6/10	AM			Discharge	169	
	4:55	0	30	115.5	77.5	
	5:55	1	"	113.2	77.5	
	6:55	2	"	111.7	78	
	7:55	3	"	106	78	
	8:55	4	"	103.2	77	
	9:55	5	"	101.7	76.5	
	10:55	6	"	100.3	76	
	11:55	7	"	100	76	
	Start charge at 7:55 am (2nd time) - Discharge 11.9					
	AM			Charge	169	
5/10	12:00	0	40	127	75.5	74.5
	.02	2	"	124		
	.05	5	"	122		
	.10	10	"	121		
	.20	20	"	119.7		
	.30	30	"	118.2		
	.40	40	"	117		
	1.00	60	"	116	85	75
	.20	80	"	114.2		
	.40	100	"	113.7		
	2.00	120	"	112.2	93.2	75
	.20	140	"	111		
	.40	160	"	109.2		
	.50	170	"	107		
	3.00	180	"	106.2	78.5	75.5

DATE	TIME	MIN	AMPS	VOLTS	TEMPS	
				39V	39.5	101.5
5/10/10	AM					
	3:10	180	40	105		
	.20	200	"	100		-133.3
	.30	210	"	97		
	.40	220	"	96		
	.50	230	"	90.2		
	4:00	240	"	84	78.5	77
	.10	250	"	69	78.5	76
	.16	256	"	50	107.7	-120.9
	AM			Charge	170	
5/10	4:55	0	30		100.7	76
	5:55	1	"		105.7	76
	6:55	2	"		103	76
	7:55	3	"		102.2	76
	8:55	4	"		101.8	75
	9:55	5	"		74.5	74.5
	10:55	6	"		97.9	75.5
	11:55	7	"	178	93.5	77
				Discharge	170	
5-10-10	12:00	0	240	143		
	.02	2	"	126.5		
	.05	5	"	133.5		
	.10	10	"	132		
	.20	20	"	129		
	.30	30	"	126.7		
	.40	40	"	124.7		

DATE	TIME	MIN	AMPS	VOLTS 298	TEMP 398	Sulfur	
5-10-09	PM 11.55	7	30	116	102	76.2	
				Discharge 171			
5/11	AM 12.00	0	40	140			
	102	2	"	137			
	.05	5	"	134			
	.10	10	"	132			
	.20	20	"	129.7			
	.30	30	"	127			
	.40	40	"	125.5			
	1.00	60	"	123.2	104	25.7	
	.20	80	"	120.2			
	.40	100	"	118.5			
	2.00	120	"	117	117	76	
	.20	140	"	116			
	.40	160	"	114			
	3.00	180	"	112	109.5	76.2	
	.20	200	"	108			
	.30	210	"	110.5			
	.40	220	"	113			
	.50	230	"	111			-153.3
	4.00	240	"	97.7	112	75.2	
	.10	250	"	84			
	.20	260	"	82.7			
	.30	270	"	75			
	.39½	279½	"	50	114.5	74.7	-186.3

DATE	TIME	MIN	AMPS	VOLTS	TEMP	Sulfur	
5-10-09	PM 100	60	40	112	98.6	78	
	.20	80	"	1.20			
	.40	100	"	1.18			
	2.00	120	"	1.17	101.7	72.5	
	.20	140	"	1.15			
	.40	160	"	1.13			
	3.00	180	"	1.112	104	79	
	.20	200	"	1.08			
	.30	210	"	1.057			
	.40	220	"	1.032			
	.50	230	"	1.00			-152.2
	4.00	240	"	.197	106.2	79	
	.10	250	"	.942			
	.30	260	"	.90			
	.30	270	"	.802			
	.40	280	"	.50			-128.7
				Charge 171			
5-10-09	PM 4.55	6	30	116.5	78		
	5.55	1	1	109.5	78		
	6.55	2	1	106.2	78		
	7.55	3	1	103.5	78		
	8.55	4	1	101.	78		
	9.55	5	1	99.5	78		
	10.55	6	1	99.2	76.2		



DATE	Time	Min.	Amp	Volts 398	Temp 398	Temp Scale	
5/11/09	PM 3.20	200	40	1.08			
	42	222	"	1.077			
	50	230	"	1.00			− 153.3
	4.00	240	"	.97	1092	727	
	10	250	"	.942			
	20	260	"	.90			
	30	270	"	.74			
	36	278	"	.50			− 185.3
				Charge = 173			
5/11/09	PM 4.55	0	30	1.107	71.7		
	5.55	1	"	1.105	71.2		
	6.55	2	"	105	71		
	7.55	3	"	1037	715		
	8.55	4	"	102	72		
	9.55	5	"	101	73		
	10.55	6	"	1007	73.2		
	11.55	7	"	176.2	100	73	
				Discharge = 173			
5/12	AM 12.00	0	40	142.5			
	.02	2	"	138.2			
	.05	5	"	1.34			
	.10	10	"	132			

DATE	Time	Min.	Amp	Volts 398	Temp 398	Temp Scale	
				Discharge = 172			
5-11-09	PM 12.00	0	40	142			
	.02	2	"	138			
	.05	5	"	1342			
	.10	10	"	132			
	.20	20	"	1295			
	.30	30	"	137			
	.40	40	"	1351			
	1.00	60	"	1.222	102.5	73.2	
	.20	80	"	1.20			
	.40	100	"	1.19			
	2.00	120	"	1.172	104.5	72.7	
	.20	140	"	1.16			
	.40	160	"	1.14			
	3.00	180	"	1.115	1045	72.7	

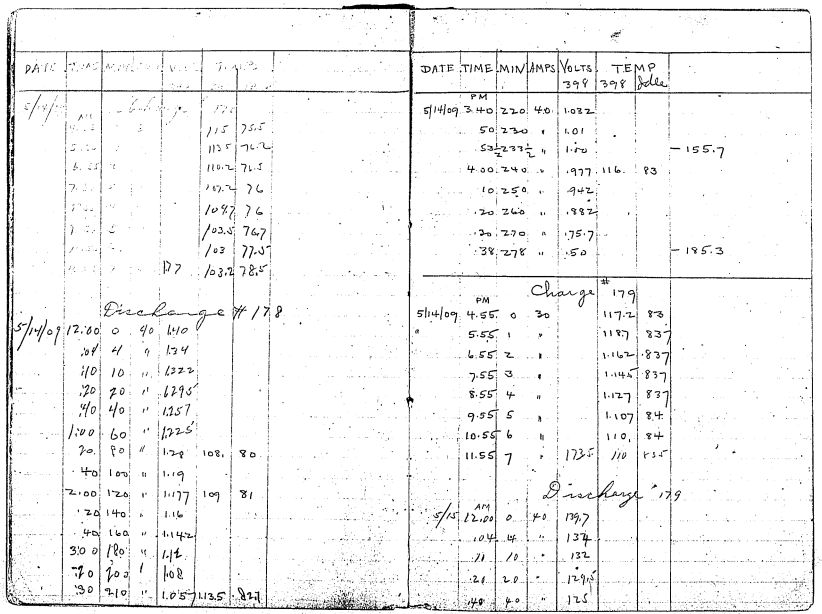
DATE	TIME	MIN AMP	VOLTS	TEMP 398	TEMP 398	TEMP Diff
	10:55	6 30		97.7	72	
	11:57	7 "		98.5	73	
		Discharge = 174				
5/12	AM 12:00	0 40	1.148			
	.05	5 "	1.34			
	.10	10 "	1.32			
	.20	20 "	1.295			
	.44	44 "	1.245			
	1.01	61 "	1.225	103	74.2	
	20	80 "	1.215			
	40	100 "	1.187			
	2.00	120 "	1.172	105.5	75.5	
	20	140 "	1.16			
	40	160 "	1.142			
	3.00	180 "	1.12	109.5	76.5	
	20	200 "	1.08			
	30	210 "	1.065			
	40	220 "	1.04			
	50	230 "	1.005			
	52	232 "	1.00			154.7
	4.00	240 "	.98	113.5	77.7	
	10	250 "	.952			
	20	260 "	.90			
	30	270 "	.792			
	42	282 "	1.50			186.7

DATE	TIME	MINUTES	VOLTS	TEMP.
			291 398	Solar
			Charge 175	
5/12/09	PM 4:55	=	120	78
	5:55	1	116.2	79.5
	6:55	2	113	79.7
	7:55	3	111.7	80
	8:55	4	108	80
	9:55	5	104.5	80
	10:55	6	104.5	79.5
	11:55	7	104	79
			Discharge 175	
5/13	12:00		102	
			138	
			134	
			132.7	
			129.5	
			127	
			125.5	
	1:00	60	122.2 105	77
	2:00	120	120	
	3:00	180	118.2	
	4:00	240	117 105	76
	5:00	300	115.7	
	6:00	360	114.5	
	7:00	420	113.5	

DATE	TIME	MIN	AMPS	VOLTS	TEMPS 315	134.6	
5/12/09	PM 2:20	200	40	106.5			
	3:20	260	"	104.2			
	4:20	320	"	103.5			
	4:47	347	"	103			−150
	5:20	380	"	97.5			
	6:03	240	"	95.7	119.2	79	
	10	250	"	97.7			
	20	260	"	84			
	30	270	"	60			
	34	274	"	50	110.5	73.5	−184
				"			
5/13	AM			Charge 176			
	4:55	0	20		112.5	73.5	
	5:55	1	"		104.5	73	
	6:55	2	"		105	73.5	
	7:55	3	"		102.4	73	
	8:55	4	"		98.2	72	
	9:55	5	"		96.8	71.7	
	10:55	6	"		93.2	71.7	
	11:55	7	"	1.29	92.2	72.5	
				Discharge #176			
5/13	12:00	0	40	1.25			
	:09	1	"	1.335			
	:10	10	"	1.31			
	:20	20	"	1.282			
	:40	40	"	1.245			
	1:00	60	"	1.18			

DATE	TIME	MIN	AMPS	VOLTS 398	VOLTS 372	TEMP Side	
5/13/09	1:20	80	40	1.197	96.2	74.7	
	40	100	"	1.18			
	2:00	120	"	1.162	97.	75	
	20	140	"	1.15			
	40	160	"	1.127			
	3:05	185	"	1.095	101.5	77	
	20	200	"	1.06			
	30	210	"	1.03			
	40	220	"	1.00			− 146.7.
	50	230	"	.975			
	4:00	240	"	.947	106.2	78.	
	10	250	"	.91			
	20	260	"	.83			
	30	270	"	.169.			
	35	275	"	.150			− 183.3.
				Charge #177.			
5/13/09	PM 4:55	0	30		111015	78.5	
	5:55	1	"		109.	79.	
	6:55	2	"		106.	79.	
	7:55	3	"		104.	79.	
	8:55	4	"		101.5	79.5	
	9:55	5	"		101.	78.	
	10:55	6	"		99.	77.	
	11:55	7	"	176.	98.5	76.7	

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	Side	
5/14/09	AM						Discharge 177
	12:00	0	40	141.7			
	.04	4	"	134.2			
	.10	10	"	131.7			
	.20	20	"	129			
	.40	40	"	125			
	1:00	60	"	122	101	75	
	1:20	80	"	120			
	1:40	100	"	118			
	2:00	120	"	117	103	75.5	
	20	140	"	115.5			
	40	160	"	114			
	3:00	180	"	111	105.5	75	
	20	200	"	107			
	30	210	"	105			
	40	220	"	102			
	45	225	"	100			− 152.
	50	230	"	99			
	4:00	240	"	96.5	110	75	
	15	250	"	93			
	25	260	"	92.2			
	30	270	"	72			
	33½	273½	"	50	113	75	− 186.3



DATE	TIME	MIN	AMPS	VOLTS	TEMP 398	TEMP Solee	
	PM						
5/14/09	3.40	220	40	1.032			
	50	230	"	1.01			
	53½	233½	"	1.00			− 155.7
	4.00	240	"	.977	116	83	
	10	250	"	.942			
	20	260	"	.882			
	30	270	"	.75.7			
	38	278	"	.50			− 185.3

Charge # 179

	PM					
5/14/09	4.55	0	30	117.2	83	
"	5.55	1	"	1187	837	
	6.55	2	"	1.162	837	
	7.55	3	"	1.145	837	
	8.55	4	"	1.127	837	
	9.55	5	"	1.107	84	
	10.55	6	"	110.	84	
	11.55	7	"	1735	110	835

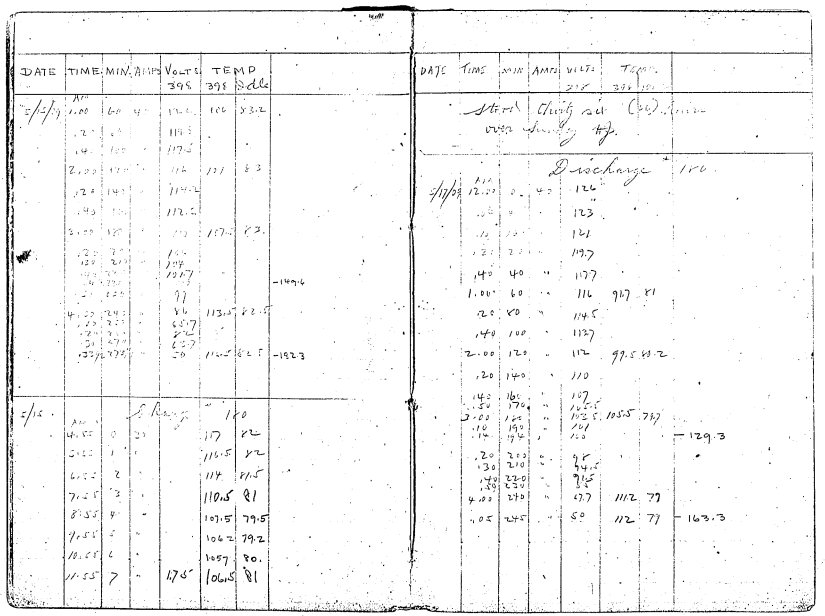
Discharge # 179

	AM					
5/15	12.00	0	40	139.7		
	.04	4	"	134		
	.11	11	"	132		
	.21	21	"	1295		
	.40	40	"	126		

DATE	TIME	MIN	AMPS	VOLTS	TEMP 398	TEMP Solee	
5/14/					1126		
	AM						
	11.55	5	40				
	12.00	10	"	1115	75.5		
	5	15	"	1135	76.2		
	10	20	"	116.2	76.5		
	15	25	"	117.2	76		
	20	30	"	1047	76		
	25	35	"	103.5	76.7		
	30	40	"	103	77.5		
	35	45	"	103.2	78.5		

Discharge # 178

5/14/09	12.00	0	40	1.40			
	.04	4	"	1.34			
	.10	10	"	1.322			
	.20	20	"	1.295			
	.40	40	"	1.257			
	1.00	60	"	1.226			
	20	80	"	1.28	108	80	
	40	100	"	1.19			
	2.00	120	"	1.177	109	81	
	20	140	"	1.16			
	40	160	"	1.142			
	3.00	180	"	1.12			
	20	200	"	108			
	30	210	"	1.05	113.5	82.7	



DATE	TIME	MIN	AMPS	VOLTS 39%	TEMP 39%	Idle	
5/12/09	AM 1.00	60	40	120	83.2		
	.20	80		119			
	.40	100		117.5			
	2.00	120		116	121	83	
	.20	140		114.2			
	.40	160		112.5			
	3.00	180		111	107.5	83	
	.20	200		109.5			
	.40	220		108.7			
	4.00	240		107.7			-149.6
	.20	260		97			
	4:20	280		86	113.5	82.5	
	.40	300		65.7			
	5.00	320		62			
	.20	340		63.7			
	.32½	352		70	116.5	82.5	-192.3
5/13	AM			Start	140		
	6:55	0	20		117	82	
	7:55	1			115.5	82	
	6:55	2			114	81.5	
	7:55	3			110.5	81	
	8:55	4			107.5	79.5	
	9:55	5			106.2	79.2	
	10:55	6			105.7	80.	
	11:55	7		175	106.5	81	

DATE	TIME	MIN	AMPS	VOLTS 39%	TEMP 39%	
				Start	Charge rate (Dec)	
				0	2 hrs.	
					Discharge	176
5/17/09	AM 12.00	0	40	126		
	.20	20	"	123		
	.40	40	"	121		
	1.00	60	"	119.7		
	.20	80	"	117		
	.40	100	"	114.5		
	2.00	120	"	112	99.5	83.2
	.20	140	"	110		
	.40	160	"	107		
	3.00	180	"	104.5	102.5	83.2
	.20	200	"	102.5	105.5	76.7
	.40	220	"	101		-129.3
	4.00	240	"	99.5		
	.20	260	"	98		
	.40	280	"	96.5		
	5.00	300	"	95		
	.20	320	"	93.5		
	.40	340	"	92.5		
	6.00	360	"	91.5		
	.20	380	"	90.5		
	.40	400	"	89.5		
	7.00	420	"	88.5		
	.20	440	"	87.7	111.2	79
	.40	460	"	86.5		
	8.00	480	"	85.5		
	.20	500	"	84.5		
	.40	520	"	83.5		
	9.00	540	"	82.5		
	.20	560	"	81.5		
	.40	580	"	80.5		
	10.00	600	"	79.5		
	.20	620	"	78.5		
	.40	640	"	77.5		
	11.00	660	"	76.5		
	.20	680	"	75.5		
	.40	700	"	74.5		
	12.00	720	"	73.5		
	.20	740	"	72.5		
	.40	760	"	71.5		
	1.00	780	"	70.5		
	.20	800	"	69.5		
	.40	820	"	68.5		
	2.00	840	"	67.5		
	.20	860	"	66.5		
	.40	880	"	65.5		
	3.00	900	"	64.5		
	.20	920	"	63.5		
	.40	940	"	62.5		
	4.00	960	"	61.5		
	.20	980	"	60.5		
	.40	1000	"	59.5		
	5.00	1020	"	58.5		
	.20	1040	"	57.5		
	.40	1060	"	56.5		
	6.00	1080	"	55.5		
	.20	1100	"	54.5		
	.40	1120	"	53.5		
	7.00	1140	"	52.5		
	.20	1160	"	51.5		
	.40	1180	"	50.5		
	8.00	1200	"	49.5		
	.20	1220	"	48.5		
	.40	1240	"	47.5		
	9.00	1260	"	46.5		
	.20	1280	"	45.5		
	.40	1300	"	44.5		
	10.00	1320	"	43.5		
	.20	1340	"	42.5		
	.40	1360	"	41.5		
	11.00	1380	"	40.5		
	.20	1400	"	39.5		
	.40	1420	"	38.5		
	12.00	1440	"	37.5		

DATE	TIME	MIN	AMP	VOLTS 3 yr	TEMP 3 yr	TEMP 10 yr
5/17/09			Charge			
	4:00	0	"	114	74.5	
	5:00	1	"	110.5	74.2	
	6:00	2	"	108	74	
	7:00	3	"	105.5	74	
	8:00	4	"	102.5	73.7	
	9:00	5	"	100.	73.5	
	10:00	6	"	97.2	73.2	
	11:00	7	"	1.179	94	77.7
				Discharge = 181		
5/17	PM 12:00	0	40	1.1405		
	:04	4	"	1.1302		
	:16	16	"	1.131		
	:20	20	"	1.129		
	:40	40	"	1.125		
	1:00	60	"	1.122	99	74.2
	:20	80	"	1.197		
	:40	100	"	1.177		
	2:00	120	"	1.162	102	74.5
	:20	140	"	1.147		
	:40	160	"	1.135		
	3:00	180	"	1.07	103.5	74.2
	:20	200	"	1.077		
	:33	210	"	1.05		

DATE	TIME	MIN	AMP	VOLTS 3 yr	TEMP 3 yr	TEMP 10 yr	
5/17/09	:40	220	1/0	1.072			
	:48	228	"	1.00			152
	5:00	230	"	.99			
	:00	240	"	.957	104	74	
	:10	250	"	.91			
	:20	260	"	.837			
	:30	270	"	.64½			
	:33½	273½	"	.50			182.3
				Charge = 182			
5/17	PM 4:55	0	30		1.085	73.2	
	5:55	1	"		1.095	73.2	
	6:55	2	"				
	7:55	3	"		1.035	74	
	8:55	4	"		1.022	74.5	
	9:55	5	"		1.007	75.2	
	10:55	6	"		1.005	75.2	
	11:55	7	"	1.165	101.	75.5	
				Discharge = 182			
5/18/09	AM 12:00	0	40	1.47			
	:04	4	"	1.347			
	:10	10	"	1.32			
	:20	20	"	1.29			

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	Jelle	
5/18/09	AM 12:40	40	40	125.5			
	1:00	60	"	122.2	104	75?	
	:20	80	"	120			
	:40	100	"	116.5			
	2:00	120	"	117	105.2	75	
	:20	140	"	115.7			
	:40	160	"	114			
	3:00	180	"	111	106	74.2	
	:20	200	"	108			
	:30	210	"	107.5			
	:45	225	"	102.5			
	:48	228	"	100			— 152.
	:50	230	"	99.5			
	4:00	240	"	95	109	73.2	
	:10	250	"	92			
	:30	260	"	84			
	:35	265	"	83.5			
	:39	269	"	80	110.5	73	— 183.7
5/19			Change	"	113		
	AM 6:55	0	30.		115	73	
	7:55	1	"		110	73	
	8:55	2	"		106.5	73.2	
	9:55	3	"		104.5	73.2	
	10:55	4	"		102	73.6	
	11:55	5	"		100.2	74	
	12:55	6	"		98.7	74.2	
	1:55	7	"	117.7	97.2	75	

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	Jelle	
							#18
	12:00	0	40	1.472			
	:04	4	"	1.342			
	:10	10	"	1.38			
	:20	20	"	1.30			
	:40	40	"	1.267			
	1:00	60	"	1.23	102	75	
	:20	80	"	1.205			
	:40	100	"	1.19			
	2:00	120	"	1.170	105.2	75	
	:20	140	"	1.165			
	:40	160	"	1.142			
	3:00	180	"	1.12	107.2	75	
	:20	200	"	1.085			
	:40	220	"	1.037			
	:50	230	"	1.01			
	:53	233	"	1.000			— 155.3
	4:00	240	"	.977	111.5	75	
	:10	250	"	.94			
	:20	260	"	.198			
	:30	270	"	.172			
	:37	277	"	.150			— 184.7

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP bdle	
				Charge 184			
	PM						
5/18/09	4.55	0	30	118	75.		
	5.55	1	"	113.2	75		
	6.55	2	"	110.2	75		
	7.55	3	"	106.7	75.2		
	8.55	4	"	105	75.2		
	9.55	5	"	103.5	75.5		
	10.55	6	"	102.5	75.7		
	11.55	7	"	170.2	103	75.7	
				Discharge		114	
5/19	12.00	8	40	147.2			
	.20	12	"	135.5			
	.40	16	"	122.2			
	1.00	20	"	129.7			
	.20	24	"	125.7			
	1.00	60	"	122.5	115	75.5	
	.20	80	"	120			
	.40	100	"	119			
	2.00	120	"	117.5	106.5	75.5	
	.20	140	"	116.2			
	.40	160	"	114			
	3.00	180	"	112	109	75.5	
	.20	200	"	137.7			
	.30	210	"	126.7			
	.40	220	"	103			

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP bdle	
	AM						
5/19/09	2.50	220	40	100			153.3
	4.00	240	"	96.5	111.5	75.2	
	.10	250	"	92.5			
	.30	270	"	84			
	.50	290	"	65			
					114	75.2	183.
5/19	AM			Charge		115	
	4.55	0	40		115.2	75.2	
	5.55	1	"		114	75	
	6.55	2	"		109.5	74.5	
	7.55	3	"		105.5	74	
	8.55	4	"		102.7	73.7	
	9.55	5	"		100.2	73.5	
	10.55	6	"		99.5	73.5	
	11.55	7	"	—	100	74	
				Discharge # 185			
5/19	12.00	0	40	141			
	04	4	"	135.2			
	10	10	"	132.5			
	20	20	"	130			
	40	40	"	125.5			
	1.00	60	"	122.5	103	74	
	20	80	"	120			
	40	100	"	118.2			

DATE	TIME	MIN	AMB	VOLTS	TEMP 398	TEMP 398 diode		
5/19/09	2:00	120	70	1172	1047	74.5		
	.20	140	"	1157				
	.40	160	"	1137				
	3:00	180	"	1113	1067	76		
	20	200	"	1072				
	40	220	"	1.03				
	48	228	"	1.00				−152.
	50	230	"	992				
	4:00	240	"	.967	1085	76		
	10	250	"	912				
	20	260	"	847				
	30	270	"	632				
	33	273	"	550				−182.
				Charge = 186				
	PM							
5/19/09	4:55	0	80		1145	74.2		
	5:55	1	"		109.	74.2		
	6:55	2	"		104.5	73.5		
	7:55	3	"		99.7	72.5		
	8:55	4	"		97.7	72		
	9:55	5	"		95.5	71.5		
	10:55	6	"		95	71.5		
	11:55	7	"	1180.5	96.5	72		

DATE	TIME	MIN	AMB	VOLTS	TEMP		
5/20/09	AM						
	12:02	0	71	142.5			
	.04	4	"	135			
	.10	10	"	124.2			
	.20	20	"	129.7			
	.40	40	"	127.7			
	1.00	60	"	122.5	1055	73.5	
	20	80	"	120.2			
	.40	100	"	119			
	2.00	120	"	117.7	103	73	
	.20	140	"	116.2			
	.40	160	"	114			
	3.00	180	"	112.5	1055	73	
	.20	200	"	109.5			
	.40	220	"	107			
	.50	230	"	105			
	.55	235	"	100			−155.3
	4:00	240	"	97	108	72.5	
	.10	250	"	89			
	.20	260	"	80			
	.30	270	"	72			
	5:37	277	"	50	110	72.5	−185.

				Charge # 107			
5/20/09					116	72	
					112	73	
					109	74	
					105.5	73.5	
					102	72.5	
					99.7	71.7	
					98.2	72	
				1.777	99	73	
				Discharge # 107			
5/20/	12:00	0	Hr	1.397			
	:10	1/6	"	1.389			
	:20	1/3	"	1.385			
	:30	1/2	"	1.295			
	:40	2/3	"	1.362			
	1:00	1	"	1.232	107.5	74	
	1:20	1 1/3	"	1.302			
	:40	1 2/3	"	1.182			
	2:00	2	"	1.172	104	72	
	:20	2 1/3	"	1.16			
	:40	2 2/3	"	1.144			
	3:00	3	"	1.132	105.	72.5	
	:20	3 1/3	"	1.082			
	:30	3 1/2	"	1.057			

DATE	TIME	MIN	AMB	VOLTS	TEMP
				398	398
5/20/09	3:40	220	40	1.022	
	49½	229½	"	1.00	-153
	50	230	"	.997	
	4:00	240	"	.862/.082	72.5
	:10	250	"	.92	
	:20	260	"	.85	
	:31	271	"	.63	
	:34	274	"	.50	-182.7

Readings continued in Endurance Book thru run # 191
Cell was then removed from the Endurance Section and was run on the testing-board as follows:

				Charge # 192			
	AM						
5/24/09	6:40	0	Hr				
	7:10	30	"				
	9:10	150	"				
	11:10	270	"				
	PM 1:10	390	"				
	3:10	510	"		93.5	75.7	
	5:10	630	"		94.5	76.5	

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 378 Bells	
5/24/09	PM 7.10	750	30		95.5	77
	9.10	870	"		94.2	75.7
	40	900	"	1.84		-15 lbs.
				Discharge		
5/25	PM 9.43	—	open	1.597		
	45	0	30	1.502		
	47	2	"	1.422		
	50	5	"	1.39		
	55	10	"	1.37		
	1005	20	"	1.35		
	15	30	"	1.33		
	25	40	"	1.31		
	45	60	"	1.29	93	77.5
	11.05	80	"	126.2		
	.25	100	"	125		
	AM 4.45	120	"	123.5	91.5	74
5/25	12.05	140	"	122		
	.25	160	"	121.5		
	.45	180	"	120.5	92.5	73.7
	1.05	200	"	119.7		
	.25	220	"	119.5		
	.45	240	"	117.2	92	73.7
	2.05	260	"	117.5		
	.25	280	"	116.5		

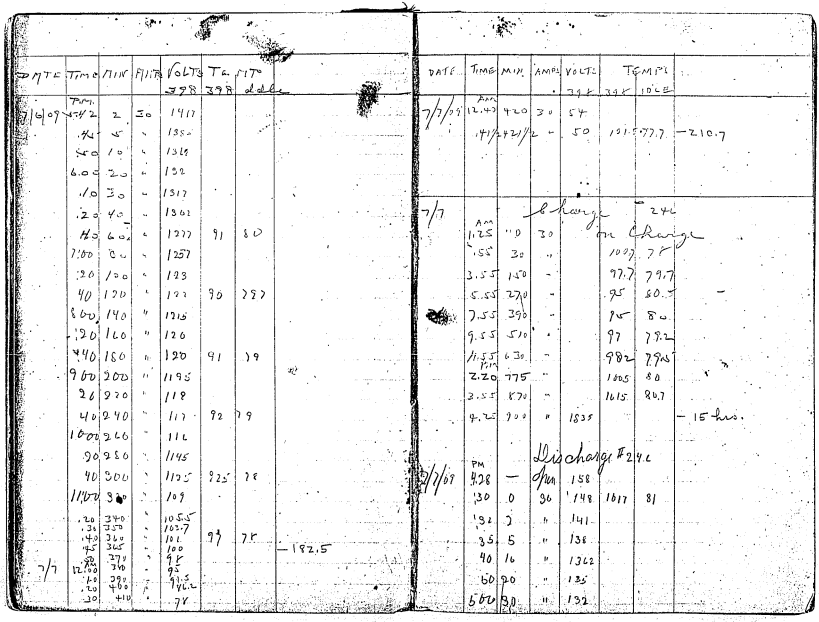
DATE	TIME	MIN	AMP	VOLTS 398	TEMP 378	TEMP 1065	
5/25/09	AM 2.45	310	30	115.5	73.7	73.7	
	3.05	320	"	114			
	.25	340	"	111.7			
	.35	350	"	110.2			
	.45	360	"	109	92.2	73	
	.55	370	"	107.5			
	4.05	380	"	106.5			
	.15	390	"	105.5			
	.25	400	"	104			-199.5
	.35	410	"	96.2			
	.45	420	"	5.07	94.5	72	wing Ready Off
	5.05	440	"	94			
	.15	450	"	51.2			
	17	452	"	50	95.5	73	-226.
5/25				Discharge			
	AM 5.20	0	30	52	93		
	.50	30	"		99	73	
	7.50	150	"		92.5	73	
	9.50	270	"		88.2	74	
	11.50 PM	390	"		90	76	
	1.50	510	"		94.2	76.7	
	3.50	630	"		99.5	78.5	
	5.50	750	"		99.2	80.2	
	7.50	870	"		94	78	
	8.20	900	"	1.85			-15 lbs.

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Table
			Discharge		#193	
5/25/09	PM 8.23	—	ohm	1.59		
	25	0	30	1.50		
	27	2	"	1.42		
	30	5	"	1.39		
	35	10	"	1.372		
	45	20	"	1.347		
	55	30	"	1.327		
	9.05	40	"	1.312		
	25	60	"	1.285	93.7	77.7
	45	80	"	1.262		
	10.05	100	"	1.25		
	25	120	"	1.237	93.5	77.5
	45	140	"	1.225		
	11.05	160	"	1.212		
	25	180	"	1.207	94	77
	45 AM	200	"	1.20.		
5/26/	12.05	220	"	119.5		
	25	240	"	119	94.5	77
	45	260	"	118		
	1.05	280	"	116.5		
	25	300	"	1157	95	76.5
	45	320	"	114.5		
	2.05	340	"	112.2		
	25	360	"	110	94.5	76.5

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Table
5/26/09	AM 2.35	370	30	119		
	10.5	240	"	118		
	1.25	310	"	118		
	2.15	350	"	117.5		
	03	400	"	100		-202
	05	430	"	95		
	25	470	"	94.5	97.5	71
	35	530	"	87		
	45	490	"	76.5		
	55	570	"	53.5		
	56	571	"	52	99.2	75.5	-225.5
5/26			Charge		#194	
	AM 4.19	0	30	1.845		
	40	20	"	100	75	
	6.03	150	"	97	77.2	
	6.43	270	"	90.7	76.7	
	10.43	390	"	87.7	76.5	
	PM 12.40	520	"	90.2	74.5	
	2.43	650	"	92	76.2	
	4.30	750	"	93.7	74.7	
	6.40	870	"	93.5	74.5	
	7.10	900	"	1.845		-15 hrs.
			Discharge		#194	
5/26/09	PM 7.13	—	ohm	1.597		
	15	0	30	1.51		
	17	2	"	1.432		
	20	5	"	1.27		

DATE	TIME	MIN	AMP	VOLTS 398	TEMP 398	TEMP dale	
	PM						
5/26/09	7.25	10	30	1.137			
	.35	20	"	1.135			
	.45	30	"	1.132			
	.55	40	"	1.131			
	8.15	60	"	1.129	91.2	73.5	
	.35	80	"	1.127			
	.55	100	"	1.125			
	9.15	120	"	1.232	91.5	73.5	
	.35	140	"	1.222			
	55	160	"	1.215			
	10.15	180	"	1.21	92.	74.1	
	35	200	"	1.202			
	.55	220	"	1.197			
	11.15	240	"	119	93	76	
	.35	260	"	118			
	.55	280	"	117			
	AM						
5/27	12.15	300	"	116	94.5	76	
	.35	320	"	115			
	.55	340	"	113.2			
	1.15	360	"	110.5	95.2	76	
	.35	380	"	107			
	.55	400	"	103			
	2.05	420	"	100			-205
	.25	440	"	95	97	76	
	.45	460	"	89			
	.65	480	"	76			
	.85	500	"	65			
	.50	485	"	.50	96.7	76.5	-227.5

DATE	TIME	MIN	AMP	VOLTS 398	TEMP 398	TEMP dale	
				Connected cell in Endurance Section for 50 runs at 8.35 A.M., 5/27/09. On the first run it will get only 3⅓ hrs. of charge.			
6/29/09				Cell has now had 50 runs in the Endurance Section. It has stood idle 6½ days and will now have overcharge tests as follows:—			
				Charge			245
7/1	AM 2.35	0	30			In Charge	
	3.05	30	-		92	76.5	
	5.05	150	-		88	77	
	7.05	270	"		91	76.5	
	9.05	390	-		91	78.2	
	11.05	510	-		94	80.7	
	PM 1.05	630	-		96	81.7	
	3.05	750	-		97	82.7	
	5.05	870	-		96.2	82.2	
	.35	900	-	1615			-15 hrs
7/6/09	7.17			Discharge			240
	513.8	-			159	84	81.7
	.40	0	36	149			



DATE	TIME	MIN.	AMPS	VOLTS	T. 398	T. 394	T. 102	
					398	394	102	
7/6/09	P.M. 12:42	2	30	1411				
	.42	5	"	1380				
	50	10	"	1369				
	6.00	20	"	132				
	.10	30	"	1317				
	.20	40	"	1301				
	.40	60	"	1277	91	80		
	7.00	80	"	1257				
	.20	100	"	123				
	.40	120	"	122	90	78.7		
	8.00	140	"	1216				
	.20	160	"	120				
	.40	180	"	120	91	79		
	9.00	200	"	1195				
	20	220	"	119				
	40	240	"	117	92	79		
	10.00	260	"	116				
	20	280	"	1145				
	40	300	"	1125	925	78		
	11.00	320	"	109				
	.20	340	"	105.5				
	.31	359	"	103.7				
	.40	369	"	101	99	75		
	.45	375	"	100				
7/7	12.00	378	"	95				
	.20	390	"	93				
	.40	408	"	91.5				
	.20	468	"	76.2				
	.30	478	"	74				

DATE	TIME	MIN.	AMPS	VOLTS	T. 394	T. 102	
7/7/09	A.M. 12.40	420	30	54			
	1.40	480	"	50	191.5	77.7	−210.7
7/7			Charge			24c	
	A.M. 1.25	0	30		Re Charge		
	1.55	30	"		102.7	77	
	3.55	150	"		97.7	79.7	
	5.55	270	"		95	80	
	7.55	390	"		95	80	
	9.55	510	"		97	78.2	
	11.55	630	"		98.2	79.5	
	P.M. 2.20	775	"		100.5	80	
	3.55	870	"		101.5	80.7	
	4.25	900	"	1835			− 15 hrs.
7/7/09	P.M. 4.38	—	Discharge	#24c			
	4.30	0	96	148	1817	81	
	31	1	"	141			
	35	5	"	138			
	40	10	"	1362			
	60	30	"	125			
	6.00	90	"	132			

DATE	TIME	MIN	AMP	VOLTS 39.8	TEMP 398	5/16	
7/7/09	PM 5	10	40	30	170		
		30	66	"	1225	101	81
		50	80	"	1245		
	6	10	100	"	1.24		
		30	120	"	1222	100	82
		50	140	"	1217		
	7	10	160	"	1215		
		30	180	"	1205	100	82
		50	200	"	120		
	8	10	220	"	119		
		30	240	"	118	101	82
		50	260	"	117		
	9	10	280	"	116		
		30	300	"	1157	102	822
		50	320	"	112		
	10	10	340	"	109		
		30	360	"	104	1025	
		40	370	"	100		—185.
		50	380	"	96		
	11.00	-10	390	"	88		
	12	-1	400	"	80	101	81 — 204.7

DATE	TIME	MIN	AMP	VOLTS 39.8	TEMP 398	105	
7/7/09		6	charge		247		
	AM 12.05	0	30		on Charge		
	.25	30	"		103	80.2	
	2.35	150	"		96.2	79	
	4.35	270	"		94	78.2	
	6.35	390	"		93	77.5	
	8.35	510	"		97	77.7	
	10.35 PM	630	"		100.2	79.7	
	12.35	750	"		103.7	82.4	
	2.35	870	"		106	84.7	
	3.05	900	"	181			— 15 hrs
				Discharge			
7/8/09	PM 3.08	—	Gun	148	106	842	
	.10	0	30	148			
	.12	2	"	141			
	.14	4	"	1386			
	.20	10	"	1265			
	.30	20	"	134			
	.40	30	"	1326			
	.50	40	"	1302			
	4.10	60	"	1272	107	862	
	50	80	"	1267			
	5.30	100	"	124			
	5.10	120	"	1225	102	87	

DATE	TIME	MIN	AMPS	VOLTS	TEMP		
				398	378	366	Idle
				Recharge 248			
7/8/09	PM 4:30	0	30				
	5:00	30	"	120			
	6:10	100	"	120	102	87.5	
	6:30	200	"	120			
	6:50	220	"	118			
	7:10	240	"	118	108.5	88	
	8:00	290	"	117			
	8:50	338	"	116			
	9:10	300	"	114	102	88	
	9:30	320	"	112			
	9:50	340	"	109			
	9:10	346	"	103?	109	88	
	10:20	370	"	100			-185.
	9:00	380		95.5			
	10:40	390	"	86			
	10:50	400	"	72			
	10:59	409	"	60			-204.5

DATE	TIME	MIN	AMPS	VOLTS	TEMP 398	TEMP 398	TEMP Table	
7/7/09	9:00 AM	180	20	1.20	93.2	77.5		
	.20	200	"	1.172				
	.45	220	"	1.182				
	10:05	240	"	1.17	94.5	77.5		
	.25	260	"	1.152				
	.45	280	"	1.13				
	11:05	300	"	1.09	96.7	77.7		
	1.6	311	"	1.056				
	.25	320	"	102.7				
	.32	327	"	1.00	97.5	78		-163.5
7/7/09	9:11 AM	change		2.49				
	11:50	30		1.197	90.5	78.5		
	12	2	"	1.58				
	12:50	60	"	1.184				
	1:00 PM	70	"	1.56				
	1.10	80	"	1.594				
	1.20	90	"	1.61				
	1.30	100	"	1.620				
	1.50	120	"	1.627	97.2	80		
	2.10	140	"	1.645				
	2.30	160	"	1.644				
	2.50	180	"	1.65	96	81		
	3.10	200	"	1.65				

DATE	TIME	MIN	AMPS	VOLTS	TEMP 398	TEMP 398	TEMP Table	
7/8/09	2:30 PM	160	20	1.652				
	50	180	"	1.657	93.5	81.2		
	3:10	200	"	1.662				
	30	220	"	1.672				
	50	240	"	1.687	90.	81.2		
	4:10	260	"	1.697				
	30	280	"	172				
	50	300	"	174	90.5	81.2		
	5:10	320	"	1775				
	30	340	"	180				
	50	360	"	1802	90.2	80		
	6:10	380	"	183				
	30	400	"	1835				
	50	420	"	184	89	.19		-7 hrs.
7/9/09	PM	Discharge		2.49				
	1:53	—	ohm	159				
	55	0	30	149				
	57	2	"	142				
	2:00	5	"	139				
	05	10	"	136				
	15	20	"	1337				
	25	30	"	132				
	35	40	"	130				
	55	60	"	1277	89	78		

DATE	TIME	MIN	AMP	VOLTS	T E	MP
				398	896	911
7/9/09	6 15 AM	5L	30	1242		
	35	100	"	1235		
	55	120	"	122	85	77
	9 15	140	"	1215		
	35	160	"	126		
	55	180	"	120	965	86
	1015	200	"	117		
	35	220	"	118		
	55	240	"	1165	91	82
	1115	260	"	115		
	35	280	"	112		
	55	300	"	109	92	75
7/10	12 AM	22	"	105		
	25	220	"	101		
	25	220	"	100	932	77

DATE	TIME	MIN	AMP	VOLTS	T E	MP
				398	896	911
7/10/09	2 25 AM	80	30	166		
	45	100	"	166		
	3 05	120	"	166	90.5	75
	25	140	"	161		
	45	160	"	166		
	4 05	180	"	167	89	75
	25	200	"	167.5		
	45	220	"	16		
	5 05	240	"	1697	88.5	75
	25	260	"	171		
	45	280	"	173		
	6 05	300	"	175	88	75
	25	320	"	177		
	45	340	"	182		
	7 05	360	"	1827	89	75.2
	25	380	"	184		
	45	400	"	1852		
	8 05	420	"	1857	89	737

7/10 — Change in Charge 250 — 7 hrs

7/10/09 PM — Discharge ±250

	8 05	—	6pm	1897		
	10	0	30	149		
	12	1	"	1497		
	15	1	45	1392		
	20	1	"	1369		
	25	2	"	1347		
	30	2	15	1325		
	35	2	30	1303		
	40	2	45	1281		
	45	3	"	1259		
	50	3	15	1237		
	55	3	30	1215		
	9 00	3	45	1193		
	05	4	"	1171		
	10	4	15	1149		
	15	4	30	1127		
	20	4	45	1105		
	25	5	"	1083		
	30	5	15	1061		
	35	5	30	1039		
	40	5	45	1017		
	45	6	"	995		
	50	6	15	973		
	55	6	30	951		
	10 00	6	45	929		
	05	7	"	907		
	10	7	15	885		
	15	7	30	863		
	20	7	45	841		
	25	8	"	819		
	30	8	15	797		
	35	8	30	775		
	40	8	45	753		
	45	9	"	731		
	50	9	15	709		
	55	9	30	687		
	11 00	9	45	665		
	05	10	"	643		
	10	10	15	621		
	15	10	30	599		
	20	10	45	577		
	25	11	"	555		
	30	11	15	533		
	35	11	30	511		
	40	11	45	489		
	45	12	"	467		
	50	12	15	445		
	55	12	30	423		
	1 00	12	45	401		
	05	13	"	379		
	10	13	15	357		
	15	13	30	335		
	20	13	45	313		
	25	14	"	291		
	30	14	15	269		
	35	14	30	247		
	40	14	45	225		
	45	15	"	203		
	50	15	15	181		
	55	15	30	159		
	2 00	15	45	137		

DATE	TIME	AMP	AMP	VOLTS 396	TEMP 396	TEMP 396	
7/10/07	AM 8.30	130	3	124			
	40	90		133			
	50	90		130			
	9.10	60		127	88	732	
	30	80		1.20			
	50	100		1.23			
	10.1	120		1.22	88	74	
	30	140		1.25			
	50	160		1.27			
	11.10	150		120	877	747	
	30	200		1.19			
	50	220		118			
	12.10 PM	240		116	91	76	
	30	260		1147			
	50	250		1135			
	1.10	300	"	109	94	77	
	30	320	"	104			
	40	330	"	100	96	77	
	41	331	"	100			-165.5

July 12, 1909.

Cell Nº 44 known over S making. The electrolyte was then poured out, after first adding 740 to proper height and shaking cell up. (See analysis of electrolyte in book of books.)

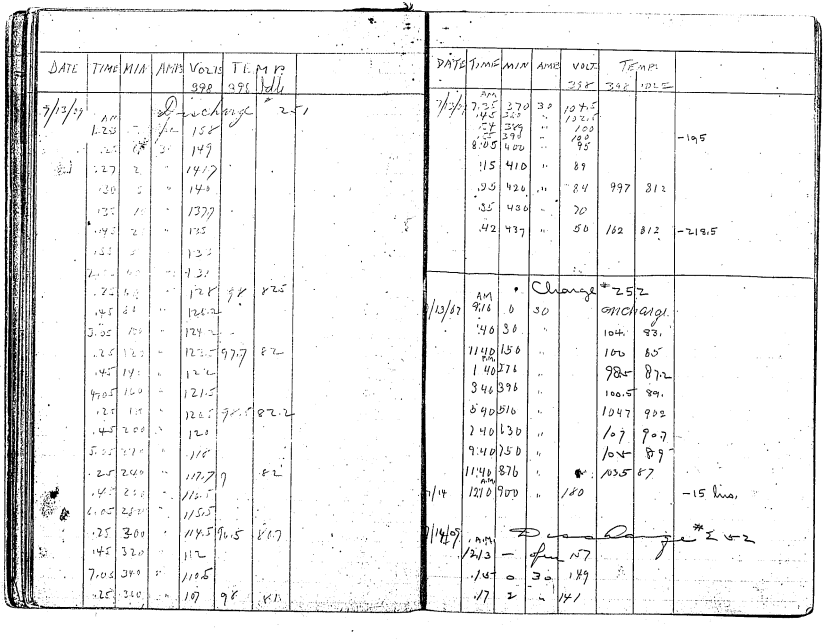
Cell was then given six rinsings with 2% KOH (500 cc), - being well shaken each time, to remove sediment.

It was then filled to proper height with 2% KOH containing 30 grams of KOH per liter, - taking just 1000 cc.

Will now run regularly on board:

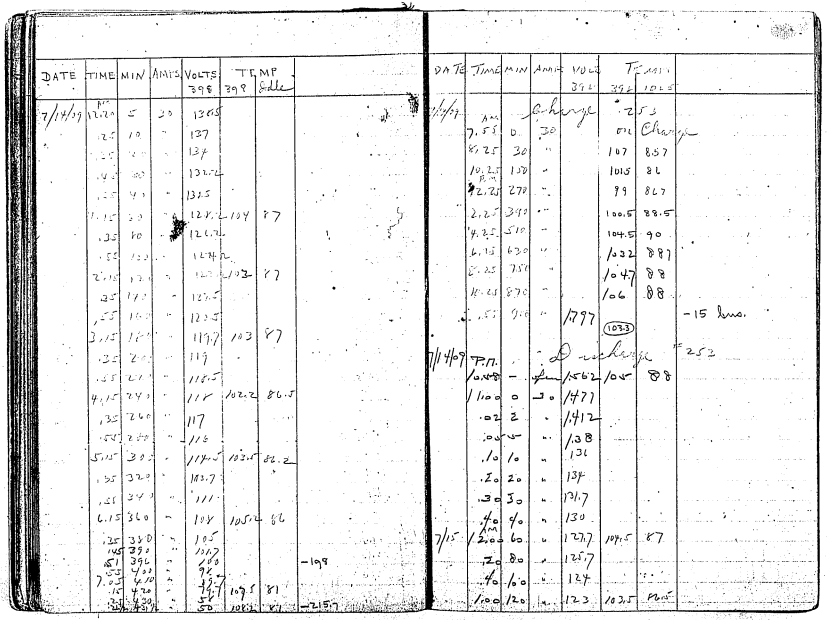
Charge = 251.

DATE	TIME	AMP	AMP	VOLTS 398	TEMP 398	TEMP Volts	
7/12/09	AM 12.20	0	30		Off Charge		
	50	30	"		83	81	
	PM 1.50	150	"		895	83	
	2.50	270	"		✓		
	4.50	390	"		957	86	
	6.50	510	"		997	862	
	8.50	630	"		1.035	87	
	10.50	750	"		1.04	862	
7/13	AM 12.50	876	"		102	87.7	
	1.20	900	"	1797			-15 hrs.



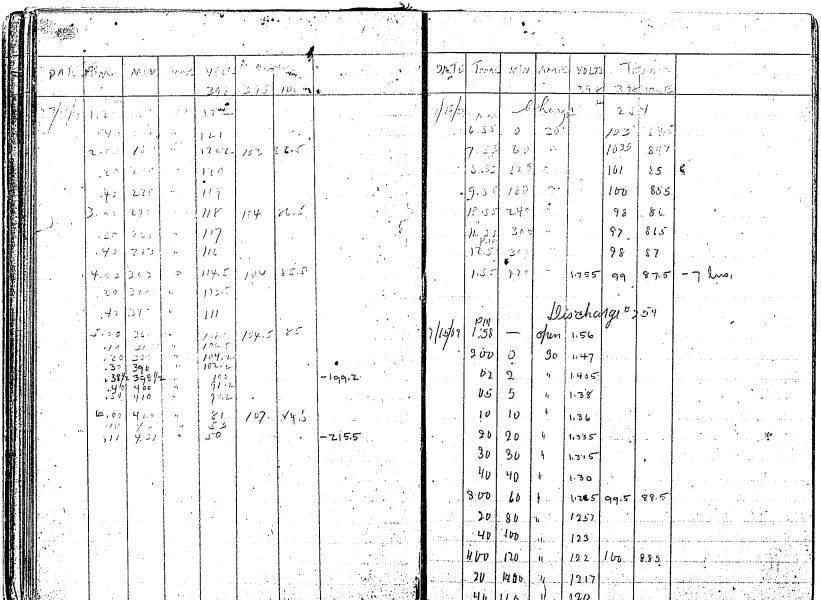
DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 396	384	
7/13/67	AM			Discharge			24
	1.25			158			
				149			
	1.27			1417			
	1.30			143			
	1.35			1377			
	1.45			135			
	1.55			133			
	2.10			131			
	2.25			127	94	825	
	2.45			126.2			
	3.05			124			
	3.25			123.5	97.7	82	
	3.45			122			
	4.05			121.5			
	4.25			126.5	96.5	82.2	
	4.45			120			
	5.05			119			
	5.25			117.7	97	82	
	5.45			116.5			
	6.05			115.5			
	6.25	3.00		114.5	96.5	81.7	
	6.45	3.20		112			
	7.05	3.40		110.5			
	7.25	3.60		109	98	81	

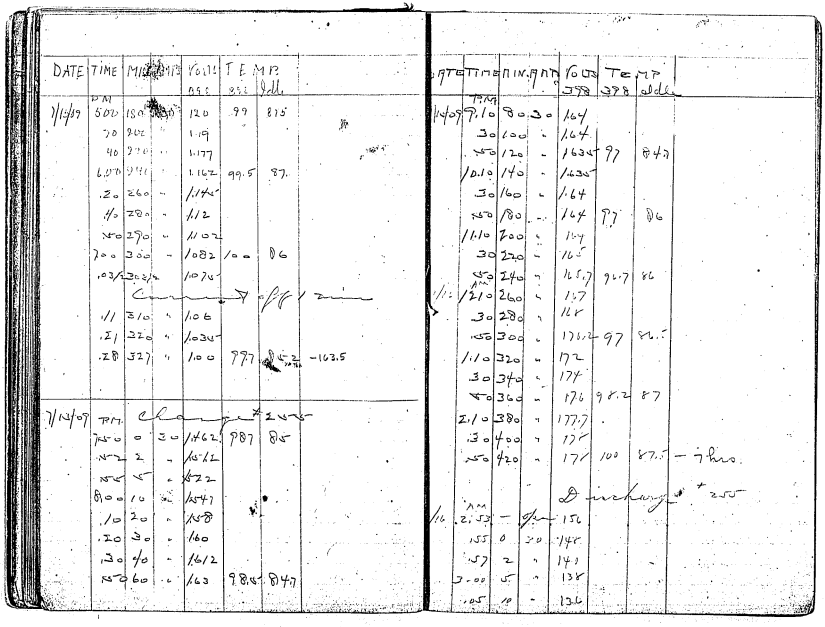
DATE	TIME	MIN	AMPS	VOLTS 384	TEMP 398	402	
7/13/67	AM 7.35	370	30	104.5			
	7.45	379	"	103.5			
	7.55	389	"	103			
	8.05	400	"	95			-19.5
	8.15	410	"	89			
	8.25	420	"	84	997	812	
	8.35	430	"	70			
	8.42	437	"	50	162	812	-219.5
7/13/67	AM 9.16	0		Charge			252
	9.40	30					104
	11.40 AM	150					100
	1.40 PM	270					98
	3.46	396					100.5
	5.40	516					104.7
	7.40	630					107
	9.40	750					104
	11.46 AM	876					103.5
7/14	12.10	900		180			-15 hrs.
7/14/67	AM 12.13			Discharge			252
	12.13	—		147			
	.14	0	30	149			
	.17	2	"	141			



DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 399	TEMP Idle	
7/14/09	PM 12.20	5	20	136.5			
	12.25	10	"	137			
	.30	15	"	137			
	.40	20	"	132.2			
	.45	25	"	131.5			
	1.15	55	"	127.2	104	87	
	.35	80	"	126.2			
	.55	100	"	124.2			
	2.15	120	"	122.5	103	87	
	.35	140	"	121.5			
	.55	160	"	120.5			
	3.15	180	"	119.7	103	87	
	.35	200	"	119			
	.55	220	"	118.5			
	4.15	240	"	118	102.2	86.5	
	.35	260	"	117			
	.55	280	"	116			
	5.15	300	"	114.5	102.5	86.2	
	.35	320	"	113.7			
	.55	340	"	111			
	6.15	360	"	109	105.2	86	
	.35	380	"	105			
	.45	390	"	103.7			
	.51	396	"	100			-198
	.53	398	"	98			
	7.05	410	"	93.7			
	.15	420	"	93.7	104.5	81	
	.35	440	"	92			
	.50	455	"	90	104.2	81	-215.7

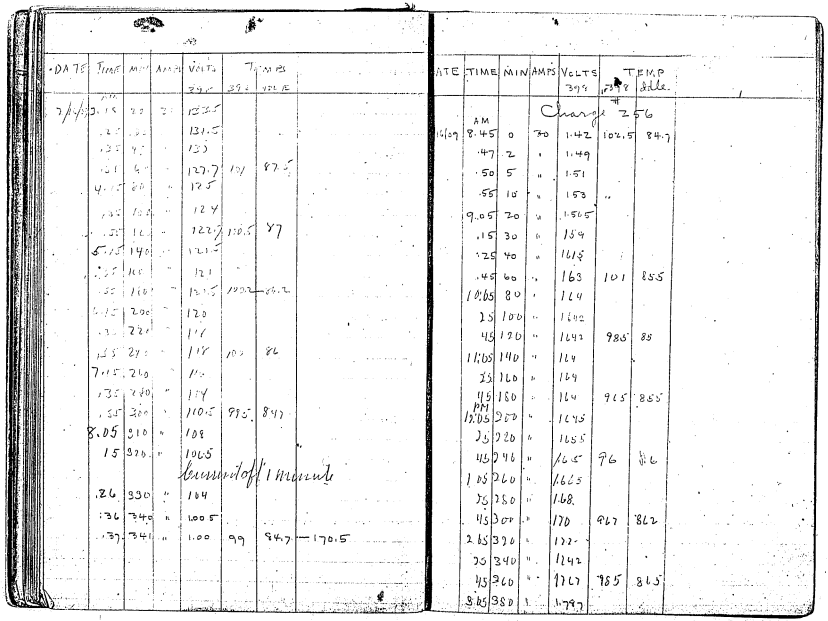
DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 399	TEMP Idle	
7/14/09				Charge			25
	AM 7.55	0	30		102	85	Charge
	8.25	30	"		107	85.7	
	10.25	150	"		101.5	86	
	PM 12.25	270	"		99	86.7	
	2.25	390	"		100.5	88.5	
	4.25	510	"		104.5	90	
	6.15	630	"		102	88.7	
	8.25	750	"		104.7	88	
	10.25	870	"		106	88	
	.55	900	"	119.7	(103.3)		-15 hms.
7/14/09	P.M.			Discharge			252
	1.00	0	30	115.2	104	88	
	1.00	0	30	117.7			
	.02	2	"	117.2			
	.05	5	"	117.2			
	.10	10	"	117.2			
	.20	20	"	117			
	.30	30	"	117.7			
	.40	40	"	120			
7/15	2.00	60	"	121.7	104.5	87	
	.20	80	"	120.7			
	.40	100	"	122			
	3.00	120	"	123	103.5	Plus	





DATE	TIME	MIN	VOLTS	TEMP	
	PM				
7/14/09	5:00	180	1.20	99	87.5
	:20	240	1.19		
	:40	270	1.177		
	6:00	340	1.162	99.5	87.
	:20	360	1.14		
	:40	420	1.12		
	7:00	480	1.107		
	:20	540	1.082	100	86
	:40	600	1.076		
			Connect to PC		
	8:00	660	1.06		
	:20	720	1.034		
	:40	780	1.00	99.7	87.5
				100.2	-162.5
7/15/09	7:00	0	1.462	98.7	86
	:20	20	1.422		
	:40	40	1.372		
	8:00	60	1.347		
	:20	80	1.328		
	:40	100	1.260		
	9:00	120	1.212		
	:20	140	1.190		
	:40	160	1.162		
	10:00	180	1.143	98.5	86.5
	:20	200	1.122		
	:40	220	1.107		
	11:00	240	1.082	99.5	86
	:20	260	1.076		
	:40	280	1.06		
	12:00	300	1.034		
	:20	320	1.00	99.7	87.5

DATE	TIME	MIN	VOLTS	TEMP	
	PM				
7/14/09	9:10	80	1.64		
	:30	100	1.64		
	:50	120	1.634	99	84.5
	10:10	140	1.634		
	:30	160	1.64		
	:50	180	1.64	99	86
	11:10	200	1.64		
	:30	220	1.65		
	:50	240	1.657	99.7	86
	12:10	260	1.67		
	:30	280	1.68		
	:50	300	1.712	99	86.5
	1:10	320	1.72		
	:30	340	1.74		
	:50	360	1.76	98.2	87
	2:10	380	1.777		
	:30	400	1.77		
	:50	420	1.77	100	87.5 — 7 hrs.
					Discharge @ 250
7/16	2:53	—	1.56		
	:55	0	1.48		
	:57	2	1.43		
	3:00	5	1.38		
	:05	10	1.36		

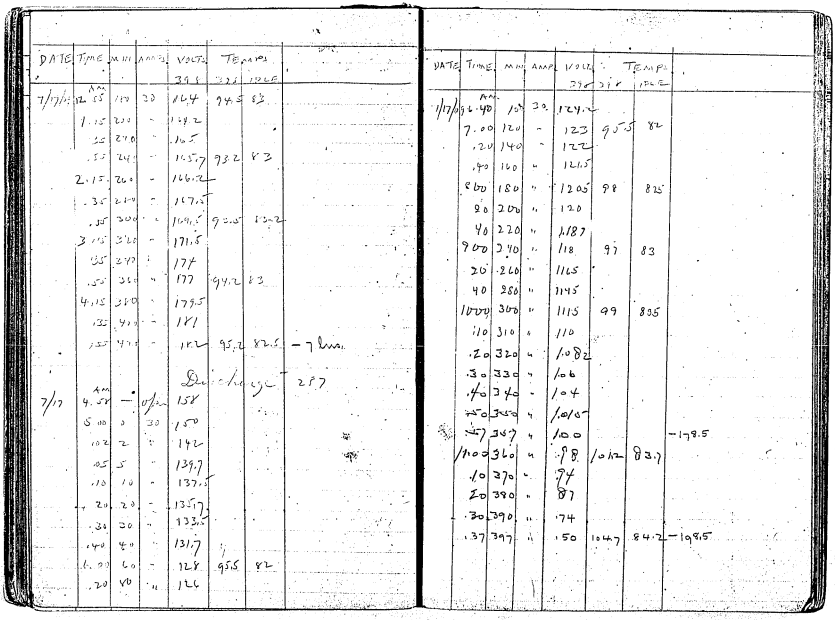


DATE	TIME	MIN	AMPS	VOLTS	TEMPS		
				394	394	394 E	
7/4/09	7:00 AM	0	0	133.5			
	.15	15	"	131.5			
	.30	30	"	130			
	.45	45	"	127.7	104	87.5	
	8:00	60	"	125			
	.15	75	"	124			
	.30	90	"	122.5	100.5	97	
	.45	105	"	121.5			
	9:00	120	"	121			
	.15	135	"	120.5	100.2	86.2	
	.30	150	"	120			
	.45	165	"	119			
	10:00	180	"	118	101	86	
	.15	195	"	117			
	.30	210	"	116			
	.45	225	"	114			
	11:00	240	"	110.5	98.5	84.2	
	8:05	310	"	108			
	15	320	"	106.5			
				Turned off 1 Heater			
	26	330	"	104			
	36	340	"	100.5			
	37	341	"	100	99	94.7	170.5

DATE	TIME	MIN	AMPS	VOLTS	TEMP	
				394	394	Table
				Charge # 256		
7/6/09	AM 8:45	0	30	1.42	102.5	84.7
	.47	2	"	1.49		
	.50	5	"	1.51		
	.55	10	"	1.53	"	
	9:05	20	"	1.565		
	.15	30	"	1.54		
	.25	40	"	1.615		
	.45	60	"	1.63	101	85.5
	10:05	80	"	1.64		
	25	100	"	1.602		
	45	120	"	1.642	98.5	88
	11:05	140	"	1.64		
	25	160	"	1.64		
	45	180	"	1.64	96.5	85.5
	PM 12:05	200	"	1.645		
	25	220	"	1.655		
	45	240	"	1.65	96	86
	1:05	260	"	1.665		
	25	280	"	1.68		
	45	300	"	1.70	96.7	86.2
	2:05	320	"	1.72		
	25	340	"	1.742		
	45	360	"	1.767	98.5	84.5
	3:05	380	"	1.797		

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Idle	
7/14/69	PM 325	400	30	1.807			
	.45	426	"	1.407	95.5	85	-7 hrs.
				Disch. thru 256			
7/14/69	PM 9.48	—	0 hm	1.57			
	.50	0	0.0	1.492			
	.51	1	"	1.417			
	.55	5	"	1.39			
	4.00	10	"	1.367			
	10	20	"	1.337			
	20	30	"	1317			
	30	40	"	130			
	50	60	"	127	.945	84	
	5.10	80	"	1255			
	30	100	"	124			
	50	120	"	122	94	83.7	
	6.10	140	"	121			
	30	160	"	1207			
	50	180	"	120	93.5	83.2	
	7.10	200	"	1187			
	30	220	"	118			
	50	240	"	1167	927	81.5	
	8.10	260	"	1157			
	.30	280	"	1122			

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Idle	
7/14/69	PM 8.48	290	30	1.12			
	50	300	"	1.102	94.7	81.2	
	9.00	310	"	1087			
	.10	320	"	1065			
	1[illegible]	32[illegible]	"	1.06			
				Remove from 1 Rm			
	21	330	"	1045			
	.31	340	"	1022			
	.39	348	"	100	94	82	-17.4
				Charge @ 57			
7/14/69	PM						
	9.47	0	30	1.45	89	82	
	47	2	"	1.492			
	10.00	6	"	1.41			
	.04	10	"	1.435			
	14	20	"	1.475			
	24	30	"	1.495			
	34	40	"	1.515			
	44	60	"	1.535	847	81	
	1.14	80	"	1.54			
	24	100	"	1.54			
	44	120	"	1.537	94	81.7	
7/17	PM 12.15	140	"	1.537			
	.35	160	"	1.537			

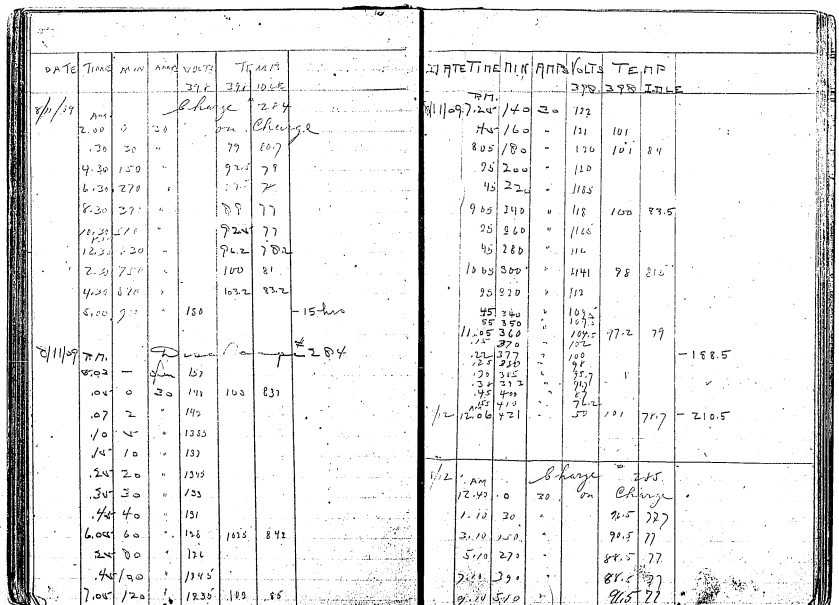


DATE	TIME	MIN	AMPS	VOLTS 394	TEMPS 224	196 F	
7/17/96	12.55 PM	180	20	164	94.5	83	
	1.15	200	"	164.2			
	.35	220	"	165			
	.55	240	"	165.7	93.2	83	
	2.15	260	"	166.2			
	.35	280	"	167.2			
	.55	300	"	169.5	93.5	83.2	
	3.15	320	"	171.5			
	.35	340	"	174			
	.55	360	"	177	94.2	83	
	4.15	380	"	179.5			
	.35	400	"	181			
	.55	420	"	182	95.2	82.5	-7 lbs.
				Del. = 1.0 cyc			287
7/17	AM 4.58	—	off	158			
	5.00	2	20	150			
	.02	2	"	142			
	.05	5	"	139.7			
	.10	10	"	137.5			
	.20	20	"	135.7			
	.30	30	"	133.5			
	.40	40	"	131.7			
	6.00	60	"	128	95.5	82	
	.20	80	"	126			

DATE	TIME	MIN	AMPS	VOLTS 274	314	TEMPS 196 F	
7/17/96	6.40 PM	100	20	124.2			
	7.00	120	"	123	95.5	82	
	.20	140	"	122			
	.40	160	"	121.5			
	8.00	180	"	120.5	98	82.5	
	8	200	"	120			
	40	220	"	118.7			
	9.00	240	"	118	97	83	
	20	260	"	116.5			
	40	280	"	114.5			
	10.00	300	"	111.5	99	83.5	
	10	310	"	110			
	20	320	"	108.2			
	30	330	"	106			
	40	340	"	104			
	50	350	"	101.7			
	11.00	360	"	100			-178.5
	11.00	360	"	98	102	83.7	
	10	370	"	94			
	20	380	"	87			
	30	390	"	174			
	37	397	"	150	104.7	84.2	-198.5

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398 Bottle
7/19/09					Cell will now run in Endurance Section for 25 runs. See results in the Endurance Book.
8/7/09					Cell has now had 25 Endurance Runs it then stood idle 6½ days and will now run as follows:
8/10	3:15	0	30		283 On Charge
	4:45	21	"	89.5	90
	5:45	151	"	94	91.5
	7:45	271	"	99.5	87.5
	9:45	391	"	97	87
	11:45	511	"	109	88
	1:45 PM	631	"	103	88.5
	3:45	751	"	103.5	89.2
	5:45	871	"	105	89.5
	6:15	901	"	127	-15 hrs
					Discharge # 283
8/10/09	PM 6:18	—	4/min	1562	
	30	0	30	147	1035 89.5
	32	2	"	140	
	33	6	"	135	

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	108
8/10/09	PM 6:36	16	30	1365		
	40	20	"	1342		
	50	30	"	1323		
	7:00	40	"	1302		
	20	60	"	1276	103	89
	40	86	"	126		
	8:00	106	"	124		
	20	120	"	123	102	89
	40	140	"	120		
	9:00	160	"	1197		
	20	180	"	1187	1065	88
	40	200	"	1195		
	10:00	220	"	118		
	20	240	"	1175	100	87
	40	260	"	116.5		
	11:00	280	"	1155		
	20	300	"	1135	100.2	85.5
	30	310	"	113		
	12:00	320	"	112		
	20	330	"	111		
8/11	12:00	340	"	110		
	10	347	"	109		
	20	360	"	108	100.2	89
	30	370	"	107		
	40	380	"	106		
	45	385	"	105		-191.7
	48	388	"	104		
	50	390	"	103		
	52	392	"	102		
	54	394	"	101		
	56	396	"	100		
	58	398	"	99		
	1:00	400	"	98		
	20	420	"	97	103	82
	40	440	"	96		-212.5

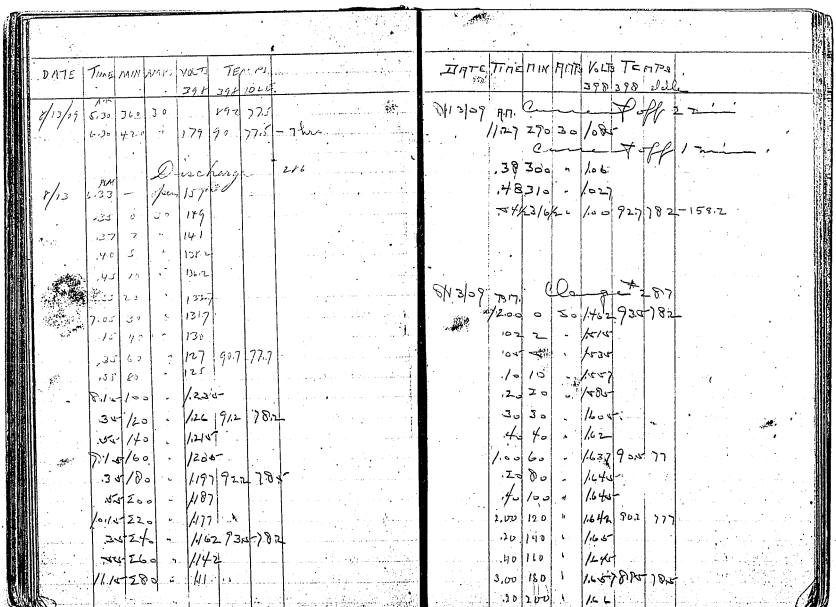


DATE	TIME	MIN	AMP	VOLTS	TEMP 378	TEMP 374	TEMP IDLE	
8/10/09					Charge		2.24	
	AM 2.00	0		20			Charge	
	.30	30	"		79	80.7		
	4.30	150	"		92.5	79		
	6.30	270	"			7		
	8.30	390	"		88	77		
	10.30	510	"		92.4	77		
	12.30	630	"		94.2	78.2		
	2.30	750	"		100	81		
	4.30	870	"		103.2	83.2		
	6.00	990	"	180				- 15 hrs
8/11/09	AM.				Charge		2.24	
	8.02	—		157				
	.04	0	30	141	100	83.1		
	.07	2	"	143				
	.10	4	"	1385				
	.14	10	"	132				
	.24	20	"	1395				
	.34	30	"	133				
	.44	40	"	131				
	6.04	60	"	136	103.5	84.2		
	.24	80	"	136				
	.44	100	"	1345				
	7.04	120	"	1235	103	88		

DATE	TIME	MIN	AMP	VOLTS	TEMP 378	TEMP 374	TEMP IDLE	
	PM.							
8/11/09	7.24	140	30	123				
	.44	160	"	121	101			
	8.05	180	"	120	101	84		
	.25	200	"	120				
	.45	220	"	1185				
	9.05	240	"	118	100	83.5		
	.25	260	"	1165				
	.45	280	"	116				
	10.05	300	"	1141	98	81.5		
	.25	320	"	112				
	.45	340	"	1032				
	.55	350	"	1072				
	11.05	360	"	104.2	97.2	79		
	.15	370	"	102				- 188.5
	.22	377	"	100				
	.25	380	"	98				
	.30	385	"	95.7	"	"		
	.34	389	"	93.7				
	.45	400	"	92				
	12.05	410	"	92.2				
8/12	12.06	421	"	90	101	77.7		- 210.5
8/12	AM.				Charge		2.45	
	12.43	0	30		Charge			
	1.13	30	"		92.5	77		
	1.43	60	"		90.5	77		
	2.13	90	"		88.5	77		
	2.43	120	"		86.5	77		
	3.13	150	"		86.5	77		

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP. 398	Delta
8/12/09	AM 11:10	630	30		93	777
	PM 1:10	750	"		925	783
	3:10	870	"		115	81
	:40	900	"	1815		-15 hrs.
8/13/09	PM		Discharge			
	3:43	—	Start	1677		
	:45	0	30	158	99	815
	:47	2	"	142		
	:50	5	"	109		
	:55	10	"	127		
	4:00	20	"	1345		
	:15	30	"	132		
	.25	40	"	131		
	:45	60	"	128	985	82
	5:05	80	"	121		
	5:25	100	"	124		
	:45	120	"	123	964	814
	6:05	140	"	122		
	.25	160	"	121		
	:45	180	"	1209	96	81
	7:05	200	"	120		
	:25	220	"	119		
	:45	240	"	118	94	80
	8:05	260	"	1165		

DATE	TIME	MIN	AMPS	VOLTS 398	TEMPS 398	398
8/13/09	PM 8:20	260	20	1153		
	45	3000	"	118	94	785
	9:05	320	"	112		
	15	330	"	111		
	25	340	"	1095		
	35	350	"	107		
	45	360	"	104	96	76
	55	370	"	102		
	10:01	371	"	1000		-188.
	10:05	375	"	98		
	15	390	"	92		
				Current off 1 min		
	26	401	"	88		
				Current off 1 min		
	37	412	"	78		
	41	420	"	68		
	41	421	"	68		
	44	424	"	1000	78	-210.5
8/13	pm	6 hrs		24		
	11:30	0	35	925	785	
8/13	12:30	60	—	96	79.5	
	1:30	120	"	93.7	78	
	2:30	180	"	92	76	
	3:30	240	"	90.5	77.7	
	4:30	300	"	89.5	80	



DATE	TIME	MIN	AMPS	VOLTS	TEMPS 398	398	1044
8/13/09	6:30 AM	363	30		99.2	77.5	
	6:30	420	"	179	90	77.5	– 7hrs
				Discharge			276
8/13	2:33 PM	–		157	95.0		
	:35	0	50	149			
	:37	2	"	141			
	:40	5	"	128.4			
	:45	10	"	124.2			
	:55	20	"	122.7			
	7:05	30	"	131.7			
	:15	40	"	130			
	:25	50	"	127	90.7	77.7	
	:35	60	"	125			
	8:14	100	"	122.6			
	:34	120	"	122	91.2	78.2	
	:55	140	"	120.4			
	9:16	160	"	120.6			
	:34	180	"	119.7	92.2	78.6	
	:55	200	"	118.7			
	10:14	220	"	117.7	"		
	:34	240	"	116.2	93.4	78.2	
	:54	260	"	114.2			
	11:14	280	"	111	"		

DATE	TIME	MIN	AMPS	VOLTS	TEMPS 398	398	1044
8/13/09	AM			Charge off	2		
	11:27	270	30	108			
				Charge off	1		
	.38	300	"	106			
	.48	310	"	102			
	8/13/09			100	92.7	78.2	– 15 hrs 2
8/13/09	PM			Charge off	2		
	12:00	0	50	145	93.0	78.2	
	:02	2	"	145			
	:04	4	"	138			
	:10	10	"	135			
	:20	20	"	128			
	:30	30	"	120			
	:40	40	"	102			
	1:00	60	"	103	90.0	77	
	:20	80	"	104			
	:40	100	"	104			
	2:00	120	"	104	90.2	77.7	
	:20	140	"	104			
	:40	160	"	104			
	3:00	180	"	103	89.5	78.6	
	:20	200	"	102			

DATE	TIME	MIN	AMPS	VOLTS 398	TEMPS 398	398
8/13/09	P.M. 3:40	2.0	30	166		
	5:00	2:40	"	1672	89	77
	.20	2:60	"	169		
	.40	2:80	"	1765		
	5:00	3:00	"	1775	912	80
	.20	3:20	"	1765		
	.40	3:40	"	178		
	6:00	3:60	"	180	924	812
	.20	3:80	"	180		
	.40	4:00	"	181		
	7:00	4:20	"	181	94	81 — 7 hrs
				Discharge 7.28		
8/13/09	PM 1:03	—	Qui	158		
	05	0	60	148		
	07	2	"	142		
	10	5	"	1395		
	15	10	"	137		
	25	20	"	1345		
	35	30	"	132		
	45	40	"	130		
	8:05	40	"	126	96	825
	25	80	"	124		
	45	100	"	124		
	9:05	120	"	1231	96	83

DATE	TIME	MIN	AMPS	VOLTS 398	TEMPS 398	1026
8/13/09	PM 725	140	30	122		
	45	160	"	1215		
	1005	150	"	120	96	83
	25	200	"	119		
	45	220	"	1182		
	11:05	240	"	117	97	83
	.25	260	"	1157		
	1:45	280	"	1125		
	.55	290	"	111		
8/14	AM 12:05	300	"	109	95	82.5
		Current off 2 min				
	.17	310	"	1075		
	.27	320	"	1045		
	.37	330	"	102		
	.47	335½	"	100	95.5	82.5 — 167.7

DATE	TIME	MIN	AMPS	VOLTS	TEMPS 391	392	393	394
	AM							
8/14/09	8:10	10	30	1372				
	.20	20	"	1345				
	.30	30	"	1322				
	.40	40	"	1301				
	9:00	60	"	1278	94	94	79	82
	.20	80	"	1256				
	.40	100	"	1242				
	10:00	120	"	1223	94	92	79	82
	.20	140	"	1222				
	.40	160	"	1214				
	11:00	180	"	1205	95	77		
	.20	200	"	1195				
	.40	220	"	1181				
	PM 12:00	240	"	1177	95	77		
	10	260	"	1155				
	40	280	"	1135				
	50	290	"	1100				
	100	300	"	1085	95	77		
				Removed from service 1 min				
	11.	314	"	1064				
	.21	330	"	1037				
	91	330	"	1069	96	79		-165.

Stood idle 5½ hours over Saturday and Sunday.

DATE	TIME	MIN	AMPS	VOLTS	TEMPS 391	392	393	394
8/17	AM 7:11	60	30	1076	94	82	82	
	2.15	80	"	1063				
	.35	100	"	1052				
	.55	120	"	1042	96	84		
	3:15	140	"	1033				
	.35	160	"	1024				
	.55	180	"	1017	96	84		
	4:15	200	"	1007				
	.35	220	"	1000				
	.55	240	"	1000	96	85		
	5:15	260	"	1000				
	.35	280	"	1772				
	.55	300	"	1772	95	80		
	6:15	320	"	1772				
	.35	340	"	1772				
	.55	360	"	1072	92	77		
	7:15	380	"	1771				
	.35	400	"	1771				
	.55	420	"	1771	94	79	82	-7 hrs
				Removed from service				
8/18	AM 7:11	—	—	1577				258
	8:00	0	30	1650				
	102	2	"	1641				
	105	5	"	1592				

DATE	TIME	MIN	AMP	VOLTS 398	TEMP 398	idle
8/16/09	Cell will now run in the Endurance Section for 18 runs. See results in the Endurance Book.					
	Cell has now had 18 Endurance Runs and will now run as follows:-					
			Charge 30.7			
8/17/09	AM 4.55	0	30	1.23	81.2	
	5.55	60	"	1.17	81.2	
	6.55	120	"	1.13	81.2	
	7.55	180	"	1.10	91.7	
	8.55	240	"	108	82.	
	9.55	300	"	105	82.7	
	10.55	360	"	105	83	
	11.55	420	"	1055	83.5	Charged in Endurance
	PM 12.55	480	"	105	84.5	
	1.55	540	"	1.01	86.	
	2.55	600	"	1.06	87	
	3.55	660	"	1055	872	
	4.55	720	"	1087	882	
	5.55	780	"	1092	88.5	Charged in Poetry Ground.
	6.55	840	"	108	883	
	7.55	900	"	1.085	"	

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	IDLE
			Discharge #307			
8/21/09	PM 7.58	-	dwn	152		
	8.00	0	30	146	107	885
	02	2	4	1395		
	05	5	6	107		
	10	10	11	1355		
	20	20	"	133		
	30	30	4	132		
	40	40	4	130		
	9.00	60	6	1265	1065	815
	20	80	4	1257		
	40	100	11	1246		
	10.00	120	4	123	101	88
	20	140	4	122		
	40	160	4	1215		
	11.00	180	4	120	1045	207%
	20	200	4	1195		
	40	220	4	1187		
8/22/09	AM 12.00	240	11	1177	1042	81
	.20	260	-	1164		
	40	280	-	1152		
	1.00	300	-	1124	1006	86
	20	320	-	110		
	40	340	-	1042		
	2.00	360	-	1018		

Date	Time	Min	Rate	Temp 358	Temp 358 adds
8/28/07	P.M. 1:45	30	1.00		-176.7
	2:00	360	.572	106	84
	.10	370	.707		
	.20	380	.782		
	.28	388	.80	1074	842 -194.

Stood idle 47 hours over Saturday and Sunday

Change 368

Date	Time	Min	Rate	Temp 368	Temp 368 adds
8/29/07	A.M. 12:24	0	36	cool night	
	1:00	30	.4	855	83
	3:00	150	.6	87	81
	5:00	270	.6	87	80
	7:00	390	.8	90	78
	9:00	510	.8	902	762
	11:00	630	.8	91	767
	P.M. 1:00	750	.9	9225	796.5
	3:00	870	.6	1047	782 -15 lbs.
	3:30	900	.6	1.80	

Date	Time	Min	Rate	Temp 358	Temp 358 adds
9/3/07	P.M. 3:30	Discharge # 308			
	3:33	-	.4	1.57	
	3:36	6	30	1.48	1022 79
	.37	7	-	1.42	
	.40	10	-	1.393	
	.44	14	-	1.377	
	.46	16	-	1.395	
	.50	20	-	1.34	
	4:04	30	-	1.34	
	.14	40	-	1.32	
	.36	60	-	1.29	1045 80
	.56	80	-	1.265	
	5:16	100	-	1.255	
	.36	120	-	1.24	1022 80.7
	.56	140	-	1.224	
	6:16	160	-	1.217	
	.36	180	-	1.204	1002 80.7
	.56	200	-	1.191	
	7:16	220	-	1.182	
	.36	240	-	1.174	988 80.1
	.56	260	-	1.16	
	8:16	280	-	1.14	
	.36	300	-	1.13	962 80.1
	.56	320	-	1.104	
	9:16	340	-	1.09	
	.36	360	-	1.074	917 80

DATE	TIME	MIN	AMPS	VOLTS	TENTS 398	TENTS 398	TABLE	
8/30/09	PM 9:20	360	2.30	1.00				-1911
	4:30	-		.964				
	1:30	-		.924				
	10:30	-		.86				
	7:30	-		.827				
	4:00	-		.792				
	1:10	-		.762				
	10:10	-		.740				-2055
	7:20	-		1.00	.792			

Change #309

8/30/09	PM 11:30	0	30	1.00	on charge			
8/31/09	1:00	30	"	1.025	.75			
	2:00	1:30	"	.941	.71			
	4:00	3:30	"	.865	.71			
	6:00	5:30	"	.795	.75			
	8:00	7:30	"	.730	.75			
	10:00	9:30	"	.925	.755			
	PM 12:00	11:30	"	.975	.772			
	2:00	1:30	"	.998	.790			
	3:30	3:00	"	1.012				-15 Low

DATE	TIME	MIN	AMPS	VOLTS	TENTS 398	TENTS 378	TABLE	#309
8/21/09	PM 2:30	-		1.572	.975	.787		
	3:00	30		1.443				
	3:30	30		1.447				
	4:00	30		1.382				
	4:30	30		1.365				
	5:00	30		1.337				
	5:30	30		1.317				
	6:00	30		1.30				
	6:30	30		1.27	.852	.78		
	7:00	30		1.257				
	7:30	30		1.24				
	8:00	30		1.22	.92	.78		
	8:30	30		1.212				
	9:00	30		1.20				
	9:30	30		1.197	.907	.771		
	10:00	30		1.187				
	10:30	30		1.18				
	11:00	30		1.17	.91.2	.769		
	11:30	30		1.167				
	12:00	30		1.157				
	12:30	30		1.13	.924	.765		
	1:00	30		1.107				
	1:30	30		1.067				
	2:00	30		1.01	.844	.77		

DATE	TIME	MIN	AMPS	VOLTS	TEMPS			
					358	398	TABLE	
8/31/09	P.M. 8:36	36½	30	100				-1807
	.41	37	-	.97				
	.46	38	-	.87				
	9:04	39	-	.782				
		Current off 2 mins.						
	.17	40	-	.67				
	.22	40½	-	40	97	77		-2027
		Charge #310						
8/31/09	P.M. 10:42	0	30		96	77		
	11:46	60	-		96	78		
9/1/09	A.M. 12:20	120	-		94.5	77.5		
	1:48	180	-		93	77.5		
	2:48	240	-		93.5	78		
	3:48	300	-		92	78.2		
	4:48	360	-		93	79		
	5:48	420	-	1765	94	78.2		-7845
9/1/09	P.M. 4:18	1	30	1565				
	.20	0	30	148				
	.22	2	-	140				
	.24	4	-	138				

DATE	TIME	MIN	AMPS	VOLTS	TEMPS			
					358	398	TABLE	
9/1/09	P.M. 4:34	10	30	134				
	.40	20	-	180				
	.45	30	-	1917				
	6:00	40	-	180				
	.20	60	-	178	745	795		
	40	80	-	1246				
	7:00	100	-	1297				
	20	120	-	1222	74	79		
	40	140	-	122				
	8:00	160	-	1202				
	20	180	-	1.197	93.2	777		
	40	200	-	1.182				
	9:00	220	-	1.177				
	20	240	-	1.162	92	772		
	40	260	-	1.142				
	10:00	280	-	1.105				
	20	300	-	1.104	93.7	77.		
		Current off 2 mins						
	32½	310½	-	102				
	35	313	-	1.00				-1565
9/1/09	A.M. 11:05	0	30	Charge #311				
	.07	2	-	1.570	945	77.		
	.10	5	-	1.55				
				1.562				

DATE	TIME	MIN	AMP	VOLTS 398	TEMP 398	TEMP PLE	
9/1/09	11.15 AM	10	30	1.38			
	.25	20	"	1.63			
	.35	30	"	1.61			
	.45	40	"	1.62			
	12.00 PM	60	"	1.637	94.5	78.7	
	.26	81	"	1.64			
	.45	100	"	1.642			
	1.05	120	"	1.64	94	80	
	.25	140	"	1.64			
	.45	160	"	1.642			
	2.05	180	"	1.65	93.2	80.4	
	.25	200	"	1.655			
	.45	220	"	1.665			
	3.05	240	"	1.675	94.2	81.	
	.25	260	"	1.69			
	.45	280	"	1.702			
	4.05	300	"	1.72	99	81.2	
	.25	320	"	1.742			
	.45	340	"	1.775			
	5.05	360	"	1.79	99	81.2	
	.25	380	"	1.80			
	.45	400	"	1.80			
	6.05	420	"	1.812	97.5	80.7	-7 lbs.

DATE	TIME	MIN	AMP	VOLTS 398	TEMP 398	TEMP PLE	
9/1/09	PM	Discharge 3/1					
	6.00	1	0/1	1.577			
	.10	0	30	1.482			
	.12	2	"	1.42			
	.14	4	"	1.372			
	.20	10	"	1.367			
	.30	20	"	1.344			
	.40	30	"	1.322			
	7.00	40	"	1.302			
	7.10	60	"	1.28	94	80.2	
	.30	80	"	1.256			
	.40	100	"	1.237			
	8.10	120	"	1.227	93.2	79.7	
	.30	140	"	1.22			
	.40	160	"	1.212			
	9.10	180	"	1.20	91.2	78.7	
	.30	200	"	1.19			
	.40	220	"	1.17			
	10.00	240	"	1.162	89.7	77.7	
	.30	260	"	1.142			
	.40	280	"	1.11			
	11.10	300	"	1.06	81.2	76.7	
	.30	320	"	1.027			
	.27	317	"	1.00	82.2	76.5	-15 9.5

DATE	TIME	MIN	AMPS	VOLTS	TEMP 398	TEMP 378	TEMP IDLE	
7/2/09	AM			Charge			32	
	1224	0	30	1.622	782	742		
		27	2	1.565				
		30	4	1.572				
		34	10	1.565				
		44	20	1.615				
		54	30	1.62				
		1.04	40	1.625				
		1.24	60	1.635	89	76		
		1.44	80	1.64				
	2.04		100	1.64				
		25	120	1.65	88	76		
		45	140	1.66				
	3	05	160	1.65				
		25	180	1.66	87	75		
		45	200	1.65				
	4	05	220	1.65				
		25	240	1.66	87	75		
		45	260	1.66				
	5	05	280	1.65				
		25	300	1.64	865	76		
		45	320	1.65				
	6	05	340	1.65				
		25	360	1.65	865	75		
		45	380	1.65				

DATE	TIME	MIN	AMPS	VOLTS	TEMP 398	TEMP 378	TEMP IDLE	
7/2/09	AM 1165	400	30	1.633				
	25	420	4	1.64	90	745		-7 hrs.
				Discharge			312	
9/2/09	AM 1176	—	0	1.58				
	30	0	30	1.50				
	32	2	4	1.42				
	35	5	4	1.40				
	40	10	4	1.36				
	50	20	4	1.34				
	8 00	30	4	1.32				
	10	45	4	switched				
	30	60	4	1.27	89.2	74		
	50	80	4	1.25				
	9 10	100	4	1.237				
	30	120	4	1.225	88	73.7		
	50	140	4	1.217				
	10.10	160	4	1.205				
	30	180	4	1.20	89	73.7		
	50	200	4	1.182				
	11.10	220	4	1.177				
	30	240	4	1.162	91	73.7		
	50	260	4	1.14				
	12.10	280	4	1.10				
	30	290	4	1.08				

DATE	TIME	MIN	AMPS	VOLTS	TEMP 398	TEMP 398	TEMP IDLE	
9/2/09	PM 1230	300	30	105	96.2	74.5		
	.40	60	5	102				-158
	.49	319		98.1				
	1.00	320	"	96.7				
	1.0	340	"	90.4				
	1.20	340	"	88.4				
	1.30	360	"	74.7	96.2	76		
	1.40	370	"	82.2				
	1.44	374	"	81.0	98.2			-187
9/2/09	Connected in Environmental Section to eight 47 ohms.							

DATE	Time	MIN	AMPS	VOLTS 398	TEMP 398	TEMP IDLE	
			Charge* 360				
10/7/09	PM 9:35	0	30		on charge		
	9:05	30	"		96	76.2	
	5:05	150	"		96	80.7	
	1:05	270	"		96	82	
	9:05	390	"		97	85	
	11:05	510	"		99.1	83	
10/8/09	AM 1:05	630	"		100.2	81.2	
	3:05	750	"		101.1	81.7	
	5:05	870	"		99.	81.1	
	7:35	1020	"	122			-15 hrs
			Discharge* 360				
10/8/09	AM 5:58	—	open	122	77		
	6:40	0	30	145	77.	77.2	
	41	2	"	142			
	45	5	"	135			
	50	10	"	126			
	6:00	20	"	124			
	10	30	"	132			
	20	40	"	120			
	40	60	"		96.	79.4	
	7:00	80	"	125.7			
	20	100	"	124			
	40	120	"	122	97.2	79.3	

DATE	TIME	MIN	RATE	VOLTS 3ES	LEVELS 2 3	cells	
10/8/09	8:40	140	30	1/12			
	2	160	"	1/20			
	40	180	4	1/20	97	00	
	9:00	200	"	1/19			
	20	220	"	1/18			
	40	240	"	1/17	97.2	00	
	10:00	260	"	1/16.2			
	20	280	"	1.14			
	40	300	"	1.12	100	01	
	11:00	320	"	1.09			
	20	340	"	1.05			
	40	360	"	1.00			-174.
	12:00	380	"	.917	1.032	01	
	20	400	"	.911			
	1:00 PM	420	"	.832			
	2:00	440	"	.800			-192.
	20	460	"	.711	1.11	01	
10/8/09	7:40		Change # 361				
	140	0	30	On Charge			
	200	30	"	1.04	833		
	400	250	"	1.01	85.5		
	600	270	"	1.00	83		

DATE	TIME	MIN	RATE	VOLTS 3ES	TEMPS 2 3	CELLS	
10/8/09	8:00	350	30		85	89	
	10:00 PM	510	"		98	80	
10/9/09	12:00	630	"		92	80	
	1:00	750	"		87	79.6	
	4:00	870	"		98.2	78.7	
	5:30	900	"	1.25			-15 hrs
			Discharge # 361				
10/9/09	4:38 AM	1	open	1.60	89		
	4:40	0	30	1.502	97	79.5	
	42	2	"	1.437			
	45	5	1	1.345			
	50	10	"	1.37			
	5:00	20		1.24			
	10	30		1.32			
	20	40		1.30			
	40	60		1.28	96	76	
	6:00	80		1.26			
	20	100		1.24			
	40	120		1.222	95	76	
	7:00	140		1.215			
	20	160		1.205			
	40	180		1.20	88		
	8:00	200		1.19			
	20	220		1.18			

DATE	TIME	MIN.	AMPS	VOLTS	TEMP. 378	338	1846
10/9/09	AM 2 40	30		1165	92	705	
	9 00	360		1134			
	20	220		1147			
	40	800		1134	54	77	
	10 00	320		1128			
	20	340		1017			
	30	343		1000			-1715
	40	360		8952	997	78	
	50	370		775			
	11 00	380		561			
	10	383		30			-1911
	36	416		1100	00		

Stood idle 37 hours over Saturday and Sunday

Charge 3167

10/11/09	AM. 12 25	0	300	Charge				
	55	30	"	825	779			
	2.55	150	"	87	116			
	4.55	270	"	88	116			
	6.55	390	"					
	8.55	510	"	937	776			
	10.55	630	"	1067	78			
	PM 12.55	750	"	933	781			

DATE	TIME	MIN	AMPS	VOLTS 378	338	1846	
10/11/09	PM 2.24	810	30		782	782	-15 hrs
	3.24	700	-	1533			

Discharge

10/11/09	PM 3.28	—	0/4m	1.58	94.7	79	
	30	0	30	1.489			
	32	2	"	1.42			
	35	5	"	1.392			
	40	10	"	1.372			
	50	20	"	1.34			
	4.00	30	"	1.315			
	10	40	"	1.31			
	30	60	"	1.270	732	771	
	50	80	"	1.255			
	5.10	100	"	1.232			
	30	120	"	1.224	935	78	
	50	140	"	1.216			
	6.10	160	"	1.202			
	30	180	"	1.20	94	78	
	50	200	"	119			
	7.10	220	"	1.18			
	30	240	"	1.172	93	74	
	50	260	"	1.16			
	8.10	280	"	1.145			
	30	300	"	1.132	99		

DATE	TIME	MIN	AMP	VOLTS	TEMP 378	TEMP 398	TEMP IDLE	
10/11/09	PM 8:30	2:0	30	110				
	9:10	2:40	"	105				
	20	3:40	"	1055				
	31	9:51	"	1045				
	50	9:6	"	945	1015	78		-175.5
	40	2:20	"	80				
	58	3:30	"	65				
	56	8:2	"	50	995	865		-193.
	P.M.	Charge			363			
10/11/09	11:15	0	30		98	81		
10/12/09	12:15 PM	60	"		97	81		
	1:15	120	"		95	805		
	2:15	180	"		93	80		
	3:15	240	"		93	795		
	4:15	300	"		925	795		
	5:15	360	"		92	795		
	6:15	420	"	120				-7hio.
	AM	Discharge	"					
10/12/09	6:17	—	0/m	15?				
	20	0	30	146	925	79		
	22	2		1402				
	25	5		137				
	30	10		135				

DATE	TIME	MIN	AMP	VOLTS 398	TEMPS 392	TEMPS IDLE	
10/12/09	A.M.						
	6:40	20	30	1227			
	50	30	"	1209			
	9:00	40	"	1192			
	20	60	"	1205	945	792	
	40	80	"	1205			
	200	100	"	1235			
	20	120	"	1,22	947	780	
	.40	140	"	1212			
	9:00	160	-	1220			
	20	180	-	1177	945	770	
	.40	200	-	1175			
	10:00	220	-	1172			
	20	240	-	1182	945	774	
	.40	260	-	1132			
	11:00	280	-	1047			
	1.0	300	-	1017			
	1.3	313	-	1.0	967	774	-1465
	PM	Charge	364				
10/12/09	12:25	0	30	1.537	9.22	78	
	27	2	"	1.58			
	30	5	"	1.595			

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	Delta	
10/12/09	PM 12.35	10	30	1.677			
	45	20	"	1.612			
	.55	30	"	1.615			
	1.05	40	"	1.63			
	.25	60	"	1.64	935	782	
	.45	80	"	165			
	2.05	100	"	1653			
	.25	120	"	.166	92	78	
	45	140	"	1.66			
	3.05	160	"	1.665			
	25	180	"	1677	89.5	78	
	45	200	"	1.687			
	4.05	220	"	1.69			
	25	240	"	1.71	87	77	
	45	260	"	1742			
	5.65	280	"	176			
	25	300	"	180	875	76	
	45	320	"	1877			
	6.05	340	"	1837			
	25	360	"	184	89	76	
	45	380	"	1845			
	7.05	400	"	1855			
	25	420	"	1887	90	74	-7hrs

DATE	TIME	MIN	HITS	VOLTS 898	TEMP 398		
				LD discharge			
10/12/09	PM 7:28	—	ohm	1895			
	30	0	30	1.178			
	31	2	"	1413			
	35	5	"	1895			
	40	10	"	137			
	50	20	"	134			
	8 55	30	"	102			
	10. 40	40	"	130			
	50	60	"	1273	90	135	
	60	80	"	126			
	9 10	100	"	129			
	20	120	"	1222	89	73	
	30	140	"	1217			
	10 10	160	"	121			
	30	180	"	120	88	73	
	50	200	"	1185			
	11 10	220	"	1172			
	30	240	"	1165	90.2	144	
	50	260	"	1122			
10/13/09	AM 12.10	280	"	1065			
	30	300	"	100	94	162	-150

DATE	TIME	MIN	AMP	VOLTS 398	TEMPS 398	Delle
10/12/09	[illegible]		[illegible]	[illegible]	365	
	2 10	0	30	1675		
	12	2	"	160		
	15	5	"	160		
	20	10	"	1611		
	30	20	"	163		
	40	30	"	1665		
	50	40	"	1665		
	4 10	60	"	1665	89.1	79.2
	30	80	"	1658		
	50	100	"	1662		
	5 10	120	"	1665	88.5	79.2
	30	140	"	1665		
	50	160	"	169		
	6 10	180	"	1658	86.5	77.1
	30	200	"	1658		
	50	220	"	1661		
	7 10	240	"	1709	88	77.9
	30	260	"	172		
	50	280	"	174		
	8 10	300	"	1782	89	78
	30	320	"	1812		
	50	340	"	1822		
	9 10	360	"	1822	91	76.9
	30	380	"	1837		

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	Delle	
10/13/09	7 AM	400	30	1854			
	8 10	430	"	1803	80.2	70.7	-7 hrs
10/13/09	8 AM	Disc	Lamps				
	8 13	-	5 hrs	1675			
	15	0	30	1658			
	17	2	"	1647			
	20	5	"	1637			
	24	10	"	1636			
	34	20	"	1632			
	44	30	"	1630			
	54	40	"	1628			
	1 05	60	"	1626	88.1	74	
	24	80	"	1623			
	44	100	"	1622			
	2 05	120	"	1620	88	74.5	
	34	140	"	1620			
	54	160	"	1619			
	3 05	180	"	1618	88.1	75	
	36	200	"	1618			
	56	220	"	1616	86	75	
	4 16	240	"	1692			-1465 Water introduced into tank & found & removed from tank
	4 36	260	"	1693			
	4 56	280	"	1697			
	5 16	300	"	1697	92.7	75	

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP IDLE	
	Current off 5 minutes						
10/12/09	3:30	310	30	.927			
	.40	320	"	.957			
	.50	330	"	.932			
	4:00	340	"	.161			
	.03	343	"	.150	96.	75.	-171.5
	Cell will now run in the Endurance-Station for 4½ runs. See results in the Endurance Book.						
11/15/09	Cell has now had 4½ Endurance-Runs, it then stood idle 14½ days. and will now run as follows						
	AM. Charge #13						
11/29/09	12:45	0	30				
	1.15	30	1		81.5	77.5	
	3:15	150	"		86	77.5	
	5.15	270	"		90	80.5	
	7:15	390	"		94	84.5	
	9.15	510	"		93	80.	

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Idle	
11/27/09	P.M. 1.45	630	30		94.5	78	
	2.15	660	"		94.5	77	
	3:45	810	"		94.5	76.5	
	4.45	900	"	1.517			-15 hrs
11/28/09	P.M.		Discharge				
	3:48	-	4hrs	1.577	96.	76.5	
	4.50	0	30	1.149			
	5.52	½	"	1.141			
	6.50	1	"	1.387			
	7.10	1½	"	1.362			
	8.10	2½	"	1.337			
	9.20	3½	"	1.317			
	10.30	4½	"	1.302			
	11.50	6	"	1.270	91.5	76	
	12.50	7	"	1.252			
	1.10	8	"	1.239			
	2.30	9½	"	1.232	93.5	76	
	3.50	11	"	1.216			
	5.10	12½	"	1.202			
	6.10	13½	"	1.195	93.5	77	
	7.10	14½	"	1.185			
	8.00	15½	"	1.177			
	8.40	16½	"	1.170	95	76	
	9.10	17½	"	1.165			

DATE	TIME	MIN	AMPS	VOLTS	TEMP		
				379	395	Idle	
11/30/07	PM 8.00	210	30	113			
	5.00	300	"	110.2	94	76	
	9.10	370	"	106			
	9.0	330	"	103			
	10	346	"	100			-170.
	4.0	350	"	94	0		
	50	960	"	93	88	77	
	10.00	370	"	100			
	01	311	"	50	105	78	-188.5
				Charge			
11/30/07	PM 12.20	0	30				
	50	30	"		102	100	
	2.50	150	"		95	88	
	4.50	270	"		87.2	74.5	note: 88 and start with
	6.50	390	"		85	74.5	min must in
	8.50	510	"				temp rise.
		AM					
	8.40						At 8.40 cell was taken off charge and then discharged to 50V without discharge readings.

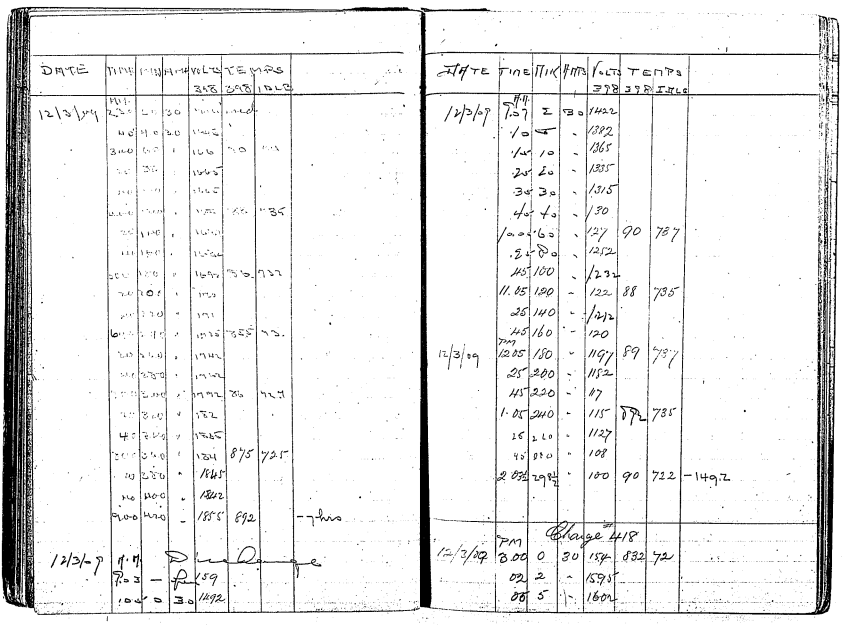
DATE	TIME	MIN	AMPS	VOLTS	TEMP		
				379	395	Idle	
11/30/07	PM						Charge 414
	3.00	0	30				Start Charge
	3.30	30	"		90	70	
	5.30	150	"		89	74	
	7.30	270	"		87	78	
	7.30	370	"		91	76	
	11.30	570	"		94	79	
12/1/07	AM 1.30	630	"		96	79	
	3.30	750	"		94.5	76	
	5.30	870	"		94	76	
	6.00	900	"	126			-15 hrs
							Discharge
12/1/07	AM 6.00	0	0	130	95	77.9	
	10	10	50	128			
	12	12	"	128			
	15	15	"	128			
	20	20	"	126.2			
	30	30	"	125.6			
	40	40	"	125.5			
	50	50	"	missed			
	7.00	60	"	124.6	94	77.2	
	20	80	"	123.7			
	50	110	"	123.5			
	8.00	120	"	122.	93	76	

Date	Time	Min	Amps	Volts 39B	Temps 39B	Temps Idle	
12/1/09	PM						
	12:45	630	80		91	77	
	2:45	750	"		895	76	
	4:45	870	"		882	74	
	6:15	900	"	125			-154
				Discharge			1.5
12/2/09	AM 5:12			1356	88	73	
	20	0	30	1349			
	22	2	"	1342			
	25	5	"	1328			
	30	10	"	1305			
	40	20	"	1275			
	50	30	"	1255			
	6:30	40	"	1230			
	50	60	"	1205	87	73	
	7:00	70	"	1242			
	10	80	"	1225			
	20	90	"	1215	86	73	
	40	110	"	1215			
	8:00	160	"	1210			
	33	193	"	1182			
	60	220	"	1180			
	9:00	220	"	1175			
	21	241	"	1162	872	73	
	40	260	"	1155			

Date	Time	Min	Amps	Volts 39B	Temps 39B	Temps Idle	
12/1/09	PM 8:50	140	30	121			
	9:00	150	"	120			
	9:10	160	"	120	915	767	
	30	300	"	1182			
	50	320	"	1175			
	10:10	340	"	1165	92	75	
	30	360	"	1155	96	75	
	50	280	"	114			
	11:10	30	"	112	935	75	
	30	320	"	110			
	50	340	"	106			
	PM 12:00	355	"	100			-1775
	10	370	"	982	962	767	
	30	370	"	970			
	50	385	"	895			
	40	290	"	1145			
	41	291		50			-195.5
					104	76	
12/1/09	PM	Charge	@	115			
	2:15	0	30	Bp charge			
	45	30	"		101	772	
	4:45	150	"		957	775	
	6:45	270	"		905	76	
	8:45	390	"		91	76	
	10:45	510	"		90	76	

Date	Time	Min	Amps	Volts 398	Temps 398	Temps Idle	
12/1/09	AM 10.00	280	80	14			
	20	300	"	112	90	725	
	40	320	"	109			
	11.00	340	"	1045			
	11	857	"	100			
	20	360	"	94	935	727	-1755
	30	370	"	95			
	40	380	"	685			
	46	356	"	50			-193.
	PM 12.22				925	735	
12/2/09	PM	Charge		1176			
	1.40	0	80		87	745	
	2.40	60	"		88	745	
	3.40	120	"		872	745	
	4.40	180	"		87	745	
	5.40	240	"		866	747	
	6.40	300	"		87	745	
	7.40	360	"		875	75	
	8.40	420	"	1313			-7hrs
12/3/09	PM	Discharge					
	843	—	0hm	158			
	45	D	80	148	81	755	
	47	I	"	141			

Date	Time	Min	Amps	Volts 398	Temps 398	Temps Idle	
12/3/09	PM 850	0	80	138			
	55	10	"	134			
	905	20	"	132			
	15	30	"	131			
	25	40	"	1255			
	45	60	"	1267	91	76	
	1005	80	"	125			
	25	100	"	1235			
	45	120	"	122	88	76	
	1105	140	"	121			
	25	160	"	120			
	45	180	"	1195	89	75	
12/4/09	AM 12.05	200	"	1175			
	25	220	"	1167			
	45	240	"	115	90	745	
	1.05	260	"	1125			
	25	280	"	1062			
	40	295	"	100	905	745	-147.5
12/4/09	AM.	Charge		1477			
	2.00	0	80	1525	907	745	
	02	2	"	157			
	05	5	"	156			
	10	10	"	155			
	20	20	"	1545			



DATE	TIME			VOLTS 348	TEMPS 398	348		
12/3/04	AM 2:35	2	30	1442				
	4:00	1	30	1442				
	3:40	1	0	1436	90	787		
	3:30	1		1436				
	3:20	1		1435				
	3:10	1		1435				
	3:00	1		1435	88	785		
	2:50	1		1435				
	2:40	1		1434				
	2:30	1		1434	89	787		
	2:20	1		1434				
	2:10	1		1434				
	2:00	1		1434	88	785		
	1:50	1		1434				
	1:40	1		1434				
	1:30	1		1434	89	787		
	1:20	1		1434				
	1:10	1		1434				
	1:00	1		1434	88	785		
	12:50	1		1434				
	12:40	1		1434				
	12:30	1		1434	89	787		
	12:20	1		1434				
	12:10	1		1434				
	12:00	1		1434	88	785		
	11:50	1		1434				
	11:40	1		1434				
	11:30	1		1434	89	787		
	11:20	1		1434				
	11:10	1		1434				
	11:00	1		1434	88	785		
	10:50	1		1434				
	10:40	1		1434				
	10:30	1		1434	89	787		
	10:20	1		1434				
	10:10	1		1434				
	10:00	1		1434	88	785		
	9:50	1		1434				
	9:40	1		1434				
	9:30	1		1434	89	787		
	9:20	1		1434				
	9:10	1		1434				
	9:00	1		1434	88	785		
	8:50	1		1434				
	8:40	1		1434				
	8:30	1		1434	89	787		
	8:20	1		1434				
	8:10	1		1434				
	8:00	1		1434	88	785		
	7:50	1		1434				
	7:40	1		1434				
	7:30	1		1434	89	787		
	7:20	1		1434				
	7:10	1		1434				
	7:00	1		1434	88	785		
	6:50	1		1434				
	6:40	1		1434				
	6:30	1		1434	89	787		
	6:20	1		1434				
	6:10	1		1434				
	6:00	1		1434	88	785		
	5:50	1		1434				
	5:40	1		1434				
	5:30	1		1434	89	787		
	5:20	1		1434				
	5:10	1		1434				
	5:00	1		1434	88	785		
	4:50	1		1434				
	4:40	1		1434				
	4:30	1		1434	89	787		
	4:20	1		1434				
	4:10	1		1434				
	4:00	1		1434	88	785		
	3:50	1		1434				
	3:40	1		1434				
	3:30	1		1434	89	787		
	3:20	1		1434				
	3:10	1		1434				
	3:00	1		1434	88	785		
	2:50	1		1434

Date	Time	Min	Amps	Volts 39B	Temps 39B	Temps 39C
12/3/09	3 10	10	30	1662		
		20	20	1652		
		30	30	1647		
		40	115	1662		
	4 00	60	"	1673	837	715
		25	85	1652		
		40	100	1657		
	5 00	130	"	1657	837	722
		20	150	1637		
		40	160	1692		
	6 00	180	"	1695	86	732
		20	200	"	170	
		40	220	"	171	
	7 00	240	"	1735	85	73
		20	260	"	1735	
		40	280	"	1734	
	8 00	300	"	182	84	735
		20	320	"	174	
		40	340	"	165	
	9 00	360	"	1859	851	735
		20	380	"	184	
		40	400	"	186	
	10 00	420	"	184	84	735

-7 hrs

DATE	TIME	MIN	AMPS	Volts 39B	TEMP. 39C	TEMP. DIF
				Discharge.		
12/3/09	PM 1003	—	0 hrs	1585		
	05	0	20	150		
	07	2	"	142		
	10	5	"	134		
	15	10	"	136		
	25	20	"	1332		
	35	30	"	1305		
	45	40	"	130	875	735
	1105	60	"	1265		
	25	80	"	120		
	AM 105	100	"	1125	852	727
12/4/09	1205	120	"	121		
	25	140	"	1205		
	45	160	"	1195		
	105	180	"	1185	826	71
	25	200	"	116		
	45	220	"	1165		
	205	240	"	1165	84	725
	25	260	"	1117		
	45	280	"	1095		
	305	300	"	1075	744	698
	3 04	299		1090		

-14 hrs 5

DATE	TIME	MIN	AMP	VOLTS	TEMPS 398	TEMPS 1015
				2.75	398	1015
	AM				80°	419
12/11/09	1105	0	0	156	962	715
	07	2	2	157		
	10	5	5	157		
	15	10	10	160		
	25	20	20	1625		
	35	30	30	1642		
	45	40	40	1660		
	55	50	50	1677	867	717
				1695		
	05	60	60	1675		
	15	70	70	1675	867	772
	25	80	80	1685		
	35	90	90	1682		
	45	100	100	1679	867	726
	55	110	110	1729		
	05	120	120	1745		
	15	130	130	1745		
	25	140	140	1727	87	727
	35	150	150	1740		
	45	160	160	177		
	55	170	170	181	885	735
	25	320	320	1822		
	45	340	340	1835		
	05	360	360	184	912	735
	25	380	380	1842		

Date	Time	Min	Amps	Volts 398	Temps 398	Temps Telle
	AM					
12/4/09	1045	400	30	124		
	11.05	420	4	1837	952	775 – 7hrs
				Discharge.		
	PM					
12/4/09	1108	—	open	158		
	10	0	30	150		
	12	2	"	1435		
	15	5	"	1395		
	20	10	"	1375		
	30	20	7	134		
	41	31	"	1305		
	50	40	2	1292		
	PM					
	1210	60	4	128	95	737
	30	80	4	125		
	50	100	4	123		
	110	120	4	123	937	74
	30	140	4	122		
	50	160	4	121		
	210	180	4	120	95	745
	30	200	4	119		
	50	220	4	118		
	310	240	4	116	955	752
	30	260	4	1132		
	50	280	"	1082		
	400	290	"	105		

Date	Time	Min	Amp	Volts 398	Temps 398	Temps Idle	
12/4/09	PM 4.13½	30½	30	1.00			−151.7
	.26	310	"	.98			
	.26	320	"	.92			
	40	330	"	845	99	75.2	
	50	340	"	.71			
	5.00	350	"	.50	103.2	75.2	−175.
12/6/09	After standing idle 4½ hrs, solution of cell was shifted out which read sp. gr. at temp of and was then filled with 21% 70% containing 11.2 g. of S.O4 per liter it will now run as follows						
	Charge #420						
12/6/09	AM 9.25	0	30		on charge		
	.55	30	"		70	72.7	
	11.55	150	"		.80	73.	
	1.55	270	"		.84	74.7	
	3.55	390	"		89	76.2	
	5.55	510	"		90.2	75.8	
	7.55	630	"		93.1	76.2	
	9.55	750	"		94.	76	
12/7/09	AM 11.55	870	"		91.2	75.9	
	12.25	900	"	182			−15 lbs

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Idle	
				Discharge #420			
12/7/09	PM 12.25	—	Open	158	91	72.7	
	30	0	30	1489			
	32	2	"	1115			
	35	5	"	1355			
	40	10	"	1362			
	50	20	"	1342			
	1.00	30	"	1325			
	10	40	"	1305			
	30	60	"	1282	91.2	73	
	50	80	"	126			
	2.10	100	"	1311			
	30	120	"	122	90.5	72.2	
	50	140	"	122			
	3.10	160	"	1215			
	30	180	"	1201	91.7	73.5	
	50	200	"	1177			
	H 10	220	"	119			
	30	240	"	1162	91.2	70.7	
	50	260	"	117			
	5.10	280	"	1158			
	30	300	"	1137	93.7	74.	
	50	320	"	1127			
	6.10	340	"	1097			
	30	360	"	1042	96.	74.5	

DATE	TIME	MIN	AMP	VOLTS 298	TEMPS 298	TEMPS IDLE	
12/7/09	PM 4:45	375	30	100			-137.7
	50	380	"	965			
	700	390	"	885			
	10	400	"	745			
	18	408	"	50	99	745	-204
			Charge				
12/7/09	AM 750	0	30				
	820	30	"		101.7	74.2	
	1020	150	"		93	73.8	
	1220	270	"		89	74.1	
	220	390	"		88	74.5	
	420	530	"		92.7	74.7	
	620	730	"		94.5	74.5	
	820	750	"		86.1	74	
	1020	870	"		91.2	73	
	1050	900	"	1815			-15 lbs.
			Discharge				
12/7/09	PM 1553	1	ohm	1355			
	55	6	30	1350	92	72	
	57	8	4	1435			
	11.00	6	1	1395			
	03	10	"	1345			

DATE	TIME	MIN	AMP	VOLTS 298	TEMPS 298	TEMPS IDLE	
12/8/09	PM 1115	20	30	1345			
	25	30	"	1322			
	35	40	"	1297			
	55	60	"	1275	91.2	73	
12/8/09	AM 12.15	80	"	1257			
	35	100	"	1242			
	55	120	"	1222	91.5	73	
	1.15	140	"	1222			
	35	160	"	1217			
	55	180	"	121	93	74	
	2.15	200	"	120			
	35	220	"	1195			
	55	240	"	1182	91	75	
	3.15	260	"	1165			
	35	280	"	1155			
	55	300	"	1137	96.5	75.5	
	4.15	320	"	1117			
	35	340	"	1065			-178
	51	356	"	100			
	55	360	"	95	99	75.7	
	5.15	380	"	80.5			
	25	390	"	64.5			
	28	393	"	80	100	75.1	-196.7

Date	Time	Min	Amps	Volts	Temps 3PS	Temps 3PB	Temps Amb	
	AM		Charge 422					
12/8/09	6 00	0	30	Ch	arge			
	30	30	"		101	76		
	8 30	150	"		93.8	95.7		
	10 30	270	"		89	94.5		
	PM 12 30	390	"		87.2	74		
	1 30	510	"		89	73.		
	4 30	630	"		90	72		
	6 30	750	"		93	72		
	8 30	870	"		93	72		
	9 00	900	"	1845			-15 hrs	
			Discharge					
12/8/09	AM 9 03	—	ohm	160				
	05	0	30	180	93.5	72		
	07	2	"	142				
	10	5	"	137				
	15	10	"	132				
	20	15	"	130				
	25	20	"	1327				
	45	40	"	1305				
	10 05	60	1	132	87.7	52		
	25	80	1	1248				
	45	100	1	1235				
	11 05	120	1	123	88.5	72.2		

DATE	TIME	MIN	AMP	VOLTS 3PS	TEMPS 3PB	TEMPS 2PB	
12/8/09	PM 12 25	140	30	1222			
	AM 12 45	160	"	1215			
12/9/09	1005	180	"	1205	87	72.5	
	25	200	"	120			
	45	220	"	119			
	1 05	240	"	1195	92	72.5	
	25	260	"	119			
	45	280	"	1155			
	2 05	300	"	1.135	93.2	72.5	
	25	320	"	1117			
	45	340	"	1095			
	55	350	"	1.01			
	57	352	"	1000			-176.
	3 05	360	"	1.079	95	72.5	
	15	370	"	1055			
	25	380	"	1045			
	35	390	"	1.038	96	72.5	-195.7
			Charge 423				
12/9/09	AM 6 10	0	30	161			
	12	2	"	1635			
	15	5	"	1635			
	20	10	"	1.634			

DATE	TIME	MIN	MMP	VOLTS 3PH	TEMPS 3PH	T/C	
12/24/09	PM 3:20	2.0	30	1642			
	40	30	"	1647			
	50	40	"	1652			
	1.10	50	"	1655	85	77	
	30	60	"	1655			
	50	100	"	1652			
	2.10	120	"	1.68	84	72.7	T
	30	140	"	1.682			
	50	160	"	1.677			
	3.10	180	"	1.682	91.7		
	30	200	"	1.677			
	50	220	"	1.687			
	4.10	240	"	1.69	84.5	72.5	T
	30	260	"	1.70			
	50	280	"	1.717			
	5.10	300	"	1.725	84.7	72.5	T
	30	320	"	1.74			
	50	340	"	1.76			
	PM 12.10	360	"	1.787	1855	73	T
	30	380	"	1.807			
	50	400	"	182			
1/1/10	1.10	420	"	1.835	88	91	T-7 hrs
1/1/10	1.13	—		Discharge 1858			

DATE	TIME	MIN	MMP	VOLTS 3PH	TEMPS 3PH	T/C	
12/31/09	PM 4:30	0	30	1510			
	.40	10	"	1427			
	.50	20	"	1389			
	5.00	30	"	1365			
	.10	40	"	1341			
	.20	50	"	1317			
	.30	60	"	1293			
	.40	70	"	1270	86.5	73	
	.50	80	"	1247			
	6.00	90	"	1230			
	.10	100	"	1227	89.2	73.7	
	.30	110	"	1217			
	.50	120	"	1207			
	7.10	130	"	1200	88.7	73.5	
	.30	140	"	1189			
	.50	150	"	1178			
	8.10	160	"	1.16	89.1	73.5	
	.30	170	"	1155			
	.50	180	"	1082			
	9.10	190	"	1050	Current 4th min		
	.30	200	"	100	93	73.5	-150

DATE	TIME	MIN	AMPS	Volts 398	TEMP. 35.5	104.E
			Charging	424		
12/9/09	PM 100	0	3.0	1033	91	339
	02	2	"	169		
	55	0	"	168		
	10	10	"	159		
	20	20	"	1610		
	30	30	"	162		
	40	40	"	1620		
	800	50	"	164	91	32
	10	60	"	169		
	20	70	"	166		
	900	120	"	166	896	93
	20	140	"	1665		
	40	160	"	1667		
	1000	180	"	1675	89	
	20	200	"	1685		
	40	220	"	1695		
	1100	240	"	170	885	76
	20	260	"	1715		
	40	280	"	1722		
12/10/09	AM 1200	300	"	1727	89	
	20	320	"	1805		
	40	340	"	182		
	1.00	360	"	1826	902	762
	20	380	"	1837		

Date	Time	Min	Amps	Volts 395	Temp 3 3.3	Idle
12/10/09	PM 140	400	30	154		
	200	420	"	1335	922	76
	10	430	"			
	A.M.					
12/10/09	218	after	30	159		
	15	0	"	150		
	17	2	"	1446		
	20	5	"	1395		
	25	10	"	1375		
	35	20	"	134		
	45	30	"	1325		
	55	40	"	129		
	3.15	60	"	1275	952	75
	35	80	"	126		
	55	100	"	1247		
	4.15	120	"	123	91	75
	35	140	"	1222		
	55	160	"	1215		
	5.15	180	"	1202	90	74
	35	200	"	1192		
	55	220	"	1182		
	6.15	240	"	1165	892	737
	35	260	"	1145		
	55	280	"	111		
	7.05	290	"	1095		

Continued 10 min

To N.V.

Date	Time	Min	Amps	Volts 398	Temps 398	Temps Idle	
		Beginning of Time					
12/10/09	7:16	300	30	1.645	90	732	
	25	309	"	1.60			-154.5
				Charge 425			
12/10/09	2:14 9:25	0	30	1.54	86.2	72	
	27	2	"	1.58			
	.30	5	"	1.59			
	.35	10	"	1.60			
	.45	20	"	1.62			
	.55	30	"	1.632			
	9.05	40	"	1.64			
	.15	60	"	1.652	88	716	
	.45	80	"	1.67			
	10.05	100	"	1.672			
	.35	120	"	1.672	88	1.10	
	45	140	"	1.672			
	11.05	160	"	1.675			
	25	180	"	1.672	86	725	T
	45	200	"	1.6755			
	12:05 PM	220	"	1.6955			
	25	240	"	1.707	855	78	
	45	260	"	1.725			
	1:05	280	"	1.7417			

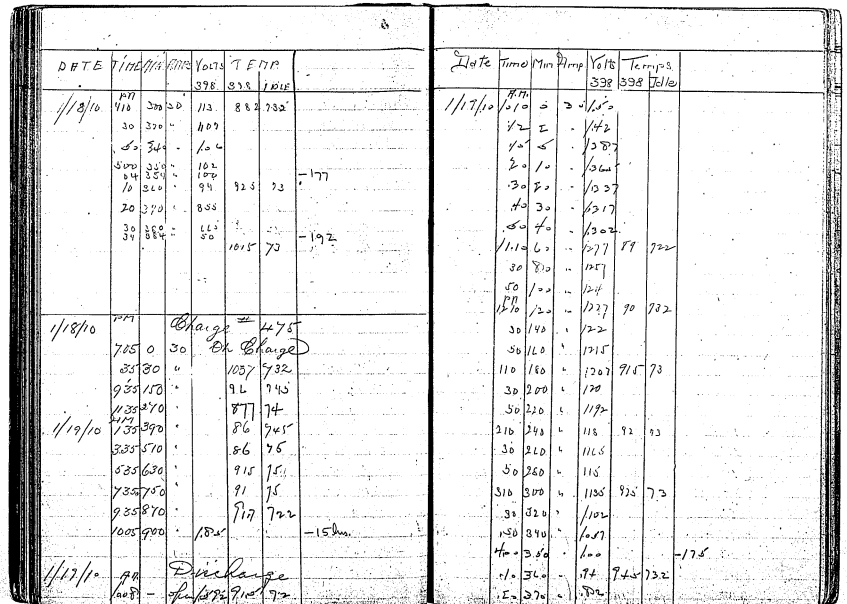
Date	Time	Min	Amp.	Volts 398	Temp. 398	Temp. Idle	
12/11/09	1:25 PM	300	30	1.795	86	72.7	T
	45	320	"	1.752			
	2:05	340	"	1.837			
	25	360	"	1.747	86.2	73.	T
	45	380	"	1.755			
	3:05	400	"	1.75			
	.25	420	"	1.80	867	72.2	T -7 hrs.
12/10/09	3:58	—	Discharge				
	3.58	—	Time (0:00)				
	.30	0	30	1.496			
	.32	2	-	1.63			
	34	6	-	1.60			
	40	10	-	1.372			
	50	20	-	1.34			
	4:00	30	-	1.32			
	10	40	-	1.30			
	.30	60	-	1.28	882	727	
	50	80	-	1.26			
	5:00	100	-	1.24			
	.30	120	-	1.232	88	727	
	50	140	-	1.22			
	6:10	160	-	1.22			
	.30	180	-	1.21	8.98	70	
	50	200	-	1.20			

DATE	TIME	MIN	AMPS	VOLTS	TEMP 398	TEMP 398	TEMP Idle	
12/10/09	PM 7 10	220	30	.113				
	30	240	"	.1145	925	92		
	50	260	"	.114				
	8 10	280	"	.110				
	30	290	"	1065				
	30	300	"	1612	92	939		-153.2
	30½	30 1/2	"	100				
	40	310	"	96				
	50	320	"	942				
	9 00	330	"	98				
	10	340	"	80				
	20	350	"	88				
	25	355	"	60	90	939		-177.5
12/13/09	All will now run in the Endurance — Section for 47 runs See results in the Endurance Book							
	All Cap Cool 47 Endurance Runs Stud Idle 99½ Runs. Connected on Board for overcharge tests							

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Idle	
	PM	Charge #73					
1/16/10	9 00	0	30	Discharge			
	30	30	"		927	70	
	11 30	150	"		62	727	
1/17/10	AM 1 30	270	"		821	74	
	330	330	"		861	74	
	5 30	510	"		885	722	
	7 30	630	"		89	78	
	9 30	750	"		935	732	
	11 30	870	"		942	745	
	PM 12 30	990	"	1887			-15 hrs.
1/17/09	PM	Discharge					
	2 00	—	off	1882	95	747	
	.02	0	30	1496			
	.08	3	-	1402			
	.10	5	-	1397			
	1 5	10	-	1375			
	1 20	20	-	134			
	1 35	30	-	1325			
	1 50	40	-	131			
	2 00	60	-	128	94	75	
	2 20	80	-	1207			
	2 40	100	-	124			
	2 55	115	-	1227	927		

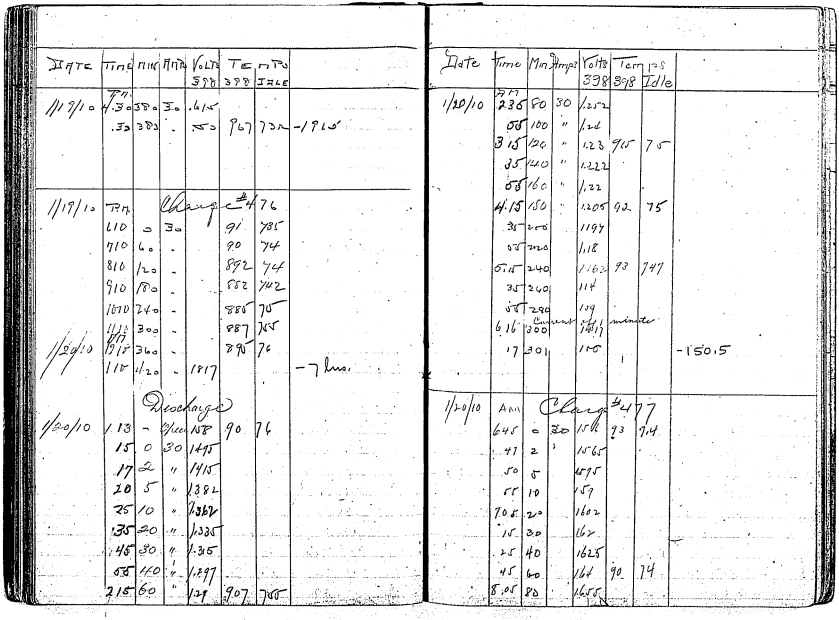
Date	Time	Min	Amp	Volts 398	Temps 398	Temps Idle	
1/18/10	835	700	30		922	742	
	1035	870	"		915	732	
	1105	900	"	1842			-15 lbs.
	AFT.		Discharge				
1/19/10	1128	—	open	1892	917	732	
	10	0	30	150			
	12	2	"	1422			
	15	5	"	1392			
	20	10	"	1367			
	30	20	"	1344			
	40	30	"	1322			
	50	40	"	1305			
	1210	60	"	1277	887	785	J.
	30	80	"	1257			
	50	100	"	1241			
	110	120	"	1232	86	735	J.
	30	140	"	1222			
	50	160	"	1212			
	210	180	"	121	915	730	
	30	200	"	120			
	50	220	"	1192			
	310	240	"	1181	910	722	
	30	260	"	1165			
	50	280	"	1155			

Date	Time	Min	Amp	Volts 398	Temps 398	Temps Idle	
	AFT.						
1/17/10	220	140	30	132			
	45	160	"	1217			
	305	180	"	1207	99	747	
	25	200	"	1177			
	45	220	"	1165			
	405	240	"	118	95	75	
	25	260	"	112			
	45	280	"	1145			
	505	300	"	1125	915	75	
	25	320	"	110			
	45	340	"	1086			
	55	360	"	1072			
	00	380	"	1060	897	762	-177.5
	15	400	"	881			
	25	420	"	76			
	35	440	"	50	1185	77	-105
	AFT.		Charge		774		
1/7/10	505	0	30		Discharge		
	835	30	"		111	775	
	1035	150	"		97	77	
1/18/10	1325	270	"		902	742	
	235	390	"		852	752	
	435	510	"		875	74	
	635	630	"		91	75	



DATE	TIME	AMP	VOLTS 398	TEMP 398	TEMP IDLE	
1/18/10	PM 410	300 20	113	88.2	73.2	
	30	330 "	100			
	50	345 "	106			
	5:00	350 "	102			
	PM	350 "	100			-1.77
	10	340 "	99	92.5	73	
	20	330 "	855			
	30	320 "	665			
	39	880 "	650			-1.92
			1015	79		
1/18/10	PM		Charge	=	475	
	705	0 30	Dx Charge			
	35	80 "	1037	932		
	935	150 "	96	745		
	1135	270 "	877	74		
1/19/10	AM 139	390 "	86	765		
	335	570 "	86	76		
	535	630 "	915	75		
	735	750 "	91	75		
	935	870 "	917	722		
	1005	900 "	1015			-1.5 hrs
1/17/10	PM		Discharge			
	1008	-	1015	79		

Date	Time	Min	Amp	Volts 398	Temps 398	Temps Idle	
1/17/10	PM 10	5	30	1305			
	12	5	-	1342			
	14	5	-	1387			
	20	10	-	1364			
	30	20	-	1337			
	40	30	-	1317			
	50	40	-	1302			
	1110	60	-	1277	89	722	
	30	80	-	1257			
	50	100	-	1241			
	PM 1210	120	-	1227	90	732	
	30	140	-	1222			
	50	160	-	1215			
	110	180	-	1207	915	73	
	30	200	-	1201			
	50	220	-	1197			
	210	240	-	1185	92	73	
	30	260	-	1175			
	50	280	-	1165			
	310	300	-	1155	925	73	
	30	320	-	1102			
	150	340	-	1087			
	Hr 3.50		-	1000			-1.75
	10	360	-	974	945	732	
	20	370	-	970			



Date	Time	Min	Amps	Volts 398	Temps 398	Idle	
11/9/10	PM 4:30	380	30	1.614			
	.35	383	"	1.50	967	732	-1765
11/17/10	PM		Charge	#4	76		
	6:10	0	30		91	785	
	7:10	60	"		90	764	
	8:10	120	"		892	764	
	9:10	180	"		882	762	
	10:10	240	"		886	765	
	11:13	300	"		887	765	
11/19/10	12:15	360	"		890	76	
	1:10	415	20	"	1817		-7 hrs.
			Discharge				
11/20/10	1:13	-	Discharge	1.58	90	76	
	1:15	0	30	1.495			
	1:17	2	"	1.415			
	1:20	5	"	1.382			
	1:25	10	"	1.362			
	1:30	20	"	1.338			
	1:45	30	"	1.305			
	2:05	40	"	1.297			
	2:15	60	"	1.29	907	765	

Date	Time	Min	Amps	Volts 398	Temps 398	Idle	
11/20/10	PM 2:35	80	30	1.272			
	2:55	100	"	1.26			
	3:15	120	"	1.23	915	75	
	3:35	140	"	1.222			
	3:55	160	"	1.22			
	4:15	180	"	1.205	902	75	
	4:35	200	"	1.197			
	4:55	220	"	1.18			
	5:15	240	"	1.162	93	747	
	5:35	260	"	1.14			
	5:55	280	"	1.09			
	6:16	300	minutes	1.041			
	6:17	301		1.05			-150.5
11/20/10	AM		Charge	#4	77		
	6:45	0	30	1.514	93	774	
	6:47	2	"	1.565			
	6:50	5	"	1.495			
	6:55	10	"	1.59			
	7:05	20	"	1.602			
	7:15	30	"	1.62			
	7:25	40	"	1.625			
	7:45	60	"	1.61	90	74	
	8:05	80	"	1.615			

Date	Time	Min	Amp	Volts	Temps 398	Temps Idle	
1/20/10	8:15 AM	1:00	20	1661			
	45	1:20	"	1665	90	74	
	9:05	1:40	"	1667			
	25	1:60	"	1671			
	45	1:80	"	1672	88	74	Temp
	10:05	2:00	"	1677			
	25	2:20	"	1677			
	45	2:40	"	1707	87	735	
	11:05	2:60	"	1725			
	25	2:80	"	1755			
	45	3:00	"	178	86.5	742	
	12:05 PM	3:20	"	182			
	25	3:40	"	1837			
	45	3:60	"	185	86	705	
	1:05	3:80	"	1855			
	25	4:00	"	186			
	45	4:20	"	1866			-7 lbs.
				Discharge			
1/20/10	1:48 PM	—	ohm	160	1885	707	
	50	0:30	"	1497			
	52	2	"	1435			
	55	5	"	1397			
	3:00	10	"	1375			
	10	20	"	132			

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP. 398	TEMP. Idle	
1/20/10	PM 3:20	30	30	130			
	30	40	"	126			
	50	60	"	126	89.5	72.5	
	5:10	80	"	124			
	30	100	"	1222			
	50	120	"	122	89.5	73	
	6:10	140	"	121			
	30	160	"	120			
	50	180	"	1193	89.5	73	
	7:10	200	"	1165			
	30	220	"	1170			
	50	240	"	114	91.5	73	
	8:10	260	"	114			
	30	280	"	1097			
	50	300	"	102	92.5	73	-153.5
	57	307		100			
				Charge			
1/20/10	7:40	0	30	153	92.5	78.5	
	42	2	"	1575			
	45	5	"	158			
	50	10	"	159			
	8:00	20	"	1605			
	10	30	"	1615			

Date	Time	Min	Amps	Volts 398	Temps 398	Temps Idle	
1/20/10	PM 8:20	40	30	162			
		40	60	" 164	92	72	
	9:00	80	"	165			
	20	100	"	165			
	40	120	"	166	92	75	
	10:00	140	"	166			
	20	160	"	166			
	40	180	"	166	91	76	
	11:00	200	"	167			
	20	220	"	168			
	40	240	"	167	91	76	
1/21/10	AM 12:00	260	"	171			
	20	280	"	172			
	40	300	"	174	91.7	76.7	
	1:00	320	"	178			
	20	340	"	182			
	40	360	"	184	92	76.7	
	2:00	380	"	184			
	20	400	"	184			
	40	420	"	184			-7 hrs.
	PM	Pulse charged					
1/21/10	2:43	-	0/end	158			Y.
	45	0	30	149	94	76	
	47	2	"	142			

Date	Time	Min	Amps	Volts 398	Temps 398	Temps Idle	
1/21/10	PM 2:50	5	30	139			
	55	10	"	136			
	3:05	20	"	133			
	15	30	"	132			
	25	40	"	130			
	45	60	"	127	94	76	
	4:05	80	"	126			
	25	100	"	124			
	45	120	"	132	93	76	
	5:05	140	"	122			1 Volt
	25	160	"	122			
	45	180	"	128	93	76	
	6:05	200	"	119			
	25	220	"	118			
	45	240	"	116	94	76	
	7:05	260	"	114			
	25	280	"	109			
	35	290	"	106			
	45	300	"	102	91	75	
	48	303	"	100			-151.5
	AM	Charge					
1/21/10	9:05	0	"	127	82	75	
	07	2	"	128			
	10	5	"	160			

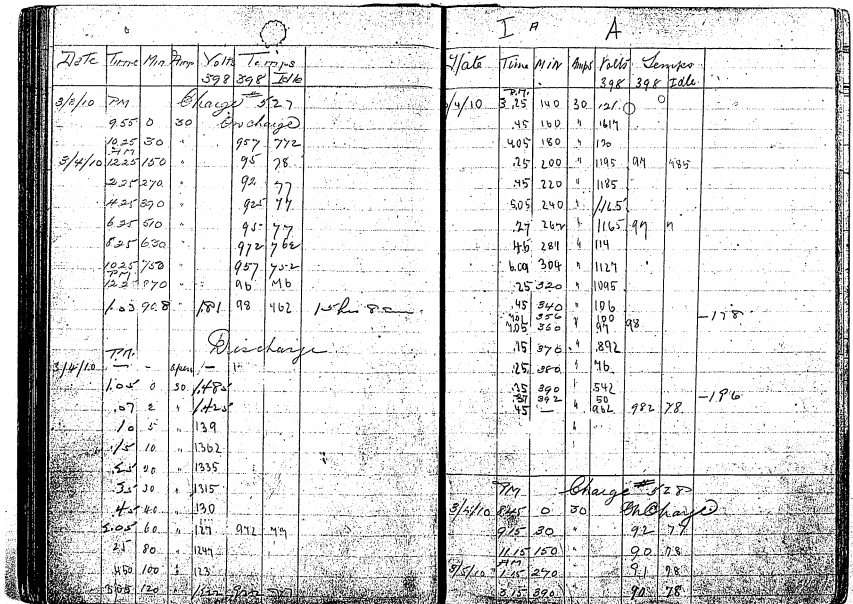
Date	Time	Min	Amps	Volts 398	Temps 398	Temps Idle	
1/21/10	9 15	10	30	1602			
	25	20	"	162			
	35	30	"	163			
	45	40	"	164			
	10 05	60	"	1652	87	74	
	25	80	"	1662			
	45	100	"	1667			
	11 05	120	"	168	807	74	J
	25	140	"	1655			
	45	160	"	169			
	12 05	180	"	169	830	74	
	25	200	"	170			
	45	220	"	1705			
	1 05	240	"	1723	84	99	
	25	260	"	174			
	45	280	"	176			
	2 05	300	"	1795	85	99	
	25	320	"	1822			
	45	340	"	1840			
	3 05	360	"	1847	868	985	
	25	380	"	1895			
	45	400	"	185			
	4 05	420	"	1855	90	985	— 7 hrs.
				FF			

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP IDLE
	PM			Discharge		
1/21/10	4 08	—	Open	140		
	10	0	90	150		
	12	2	"	142		
	15	5	"	140		
	20	10	"	1395		
	30	20	"	134		
	40	30	"	132		
	50	40	"	130		
	5 10	60	"	128	90	725
	30	80	"	1255		
	50	100	"	124		
	6 10	120	"	1235	95	73
	30	140	"	122		
	50	160	"	1215		
	7 10	180	"	1202	92	785
	30	200	"	120		
	50	220	"	118		
	8 10	240	"	1165	894	797
	30	260	"	1135		
	50	280	"	1092		
	900	300	"	106		
	10	305	"	1065	927	74
	10	305	"	100		152
	20	310	"	97		
	30	320	"	922		

Date	Time	Min	Amp	Volts 398	Temp 398	Idle
1/21/10	9.40	320	3-	747		
	50	340	-	725		
	10.00	350		65		
	03	353		60	977	.74 -176.5
				to - for charge left from to		
11				Charge #326		
3/2/10	11.03	0	30	on charge		
	30	30	"	747	782	
3/3/10	130	150	"	835	775	
	330	270	"	86	77	
	530	350	"	89	76	
	730	510	"	922	46	
	930	630	"	95	76	
	1130	750	"	95	762	
	130	870	"	967	762	
	300	960	-	1502	957	46 -176
				Discharge		
3/3/10	PM 2.03	-		1567		
	05	0	30	1667		
	07	2	"	1115		
	10	5	"	1082		
	15	10	"	196		
	21	20	"	183		

I A

Date	Time	Min	Amp	Volts 398	Temp 398	Idle
3/2/10	2.35	30	30	131		
	45	40	"	130		
	3.05	60	"	1272	91	945
	25	80	"	1245		
	46	101	"	1227		
	4.05	120	"	1219	86	732
	25	140	"	1209		
	45	160	"	1202		
	5.05	180	"	1192	88	735
	25	200	"	1187		
	45	220	"	1177		
	6.05	240	"	1161	927	449
	25	260	"	1116		
	45	260	A	1142		
	7.05	300	A	112	945	75
	25	320	A	1094		
	45	340	A	1065		
	55	350	A	1035		
	8.05	360	A	100	965	76 -180
	15	370	A	96		
	25	380	A	892		
	35	390	A	737		
	44	399	A	00	160	767 -179



Date	Time	Min	Amp	Volts 398	Temps 398	Temps Idle
8/2/10	PM			Charge	327	
–	9:55	0	30		Discharged	
	10:25 PM	30	"		957	772
8/4/10	12:25	150	"		95	78
	2:25	270	"		92	77
	4:25	390	"		925	77
	6:25	510	"		95	77
	8:25	630	"		972	782
	10:25 PM	750	"		957	772
	12:25	870	"		96	76
	1:03	908	"	181	98	462
				Discharge		
8/4/10	PM	–	open	–		
	1:04	0	30	1485		
	:07	2	"	1425		
	:10	5	"	139		
	:15	10	"	1362		
	:25	20	"	1335		
	:35	30	"	1315		
	:45	40	"	130		
	2:05	60	"	127	972	79
	:25	80	"	1249		
	:50	100	"	123		
	3:05	120	"	122	972	79

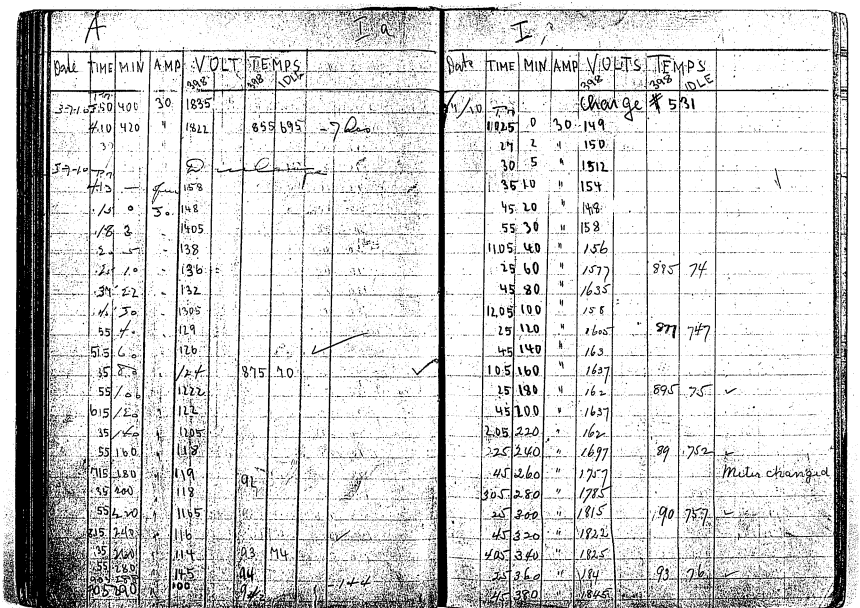
Date	Time	Min	Amps	Volts 398	Temps 398	Temps Idle
8/4/10	PM 3.25	140	30	121		
	:45	160	"	1619		
	4.05	180	"	170		
	.25	200	"	1195	94	785
	:45	220	"	1185		
	5.05	240	"	1165		
	.27	267	"	1165	94	77
	:45	281	"	114		
	6.09	304	"	1127		
	.25	320	"	1095		
	.45	340	"	106		
	7.01 / 7.05	356 / 360	"	99 / 100	98	
	.15	376	"	892		
	.25	380	"	96		
	.35 / .45	390 / 392 / —	"	542 / 50 / 962	982	78
				Charge		
8/5/10	PM 1:45	0	30	Discharged		
	2:15	30	"	92	78	
	4:15	150	"	90	78	
8/5/10	PM 1:45	270	"	91	78	
	3:15	390	"	90	78	

Date	Time	Min	Amps	Volts	Temps 398	Temps Idle	
3/5/10	PM 5:15	5:10	30	1	95	44	
	7:15	6:30	"		865	77	
	9:15	7:50	"		96	755	
	11:15	8:40	"		91	697	
	45	9:00	"	1825	92	72	-1.5
				Discharge			
3/5/10	A.M. 11:15	—	open	1572			
	30	0	30	11455			
	52	2	"	1422			
	55	5	"	1382			
3/5/10	PM 12:00	7:0	"	1357			
	10	20	"	1325			
	20	30	"	1301			
	30	40	"	1267			
	50	60	"	1262	85	712	✓
	1:10	80	"	1242			
	30	100	"	1221			
	50	120	"	1217			✓
	2:10	140	"	1209	83	711	
	30	160	"	1170			
	50	180	"	1192	84	711	✓
	3:10	200	"	1185			
	30	220	"	1172			
	50	240	"	1165			

DATE	TIME	MIN	AMPS	VOLT	TEMPS. 398	TEMPS. IDLE	
3/5/10	PM		30				
	4:12	262	1.M	115			
	30	280	"	1137			
	50	300	"	112	865	71	
	5:10	320	"	1092			
	30	340	"	1042			
	40	350	"	1007	912		-1.75.7
	50	360	"	109 945			
	6.00	370	"	865			
	10	380	"	42			
	20	390	"	53			
	30	400	"	60	915	✓	-1.85.2
				Stopped			
				Started			
				CHARGE			
3/4/10	PM 8:10	0					
	9:10	60			85	81	
	10:10	120			87	807	
	11:10	180			88	80	
3/5/10	AM 12:10	240			90	81	
	1:10	300			895	80	
	2:10	360			89	79	
	3:10	420		174	90	785	-7.0

DATE	TIME	MIN	VOLTS AMPS	TEMPS 398	TEMPS 398 IDLE
	A.M.		DISCHARGE		
3/7/10	3:13	—	fully 1582		
	:15	0	30 148		
	:17	2	140		
	:20	5	1375		
	:25	10	1355		
	:35	20	1335		
	:45	30	132		
	:55	40	129		
	4:5	60	126		
	:35	80	1222	91	782
	:55	100	122		
	5:15	120	1205	9.15	477
	:35	140	120		
	:55	160	1185		
	6:15	180	1177	92	482
	:35	200	1173		
	:55	220	116		
	7:15	240	1142	92	457
	:35	260	1115		
	:55	280	105		
	8:0	285	100	947	777 — 1441

Date	Time	Min	Amps	Volts 398	Temps 398	Temps Idle	Remarks
			J a				
3/7/10	A.M.		blank — 53				
	9:10	0	30	15-05	90	77	
	:12	2	"	1532			
	:15	5	"	1545			
	:20	10	"	157			
	:30	20	"	157			
	:40	30	"	1577			
	:50	40	"	1605			
	10:10	60	"	1627	865	745	
	:30	80	"	1637			
	:50	100	"	1647			
	11:10	120	"	1655	84	73	
	:30	140	"	1627			
	:50	160	"	1637			
3/7/10	P.M. 12:10	180	"	168	815	71	
	:20	200	"	1687			
	:30	220	"	1682			
	1:10	240	"	172	815	71	
	:30	260	"	168			
	:50	280	"	1691			
	2:15	305	"	149	80	71	
	:30	320	"	1805			
	:50	340	"	1822			
	3:10	360	"	1827	85	71	
	:30	380	"	182			



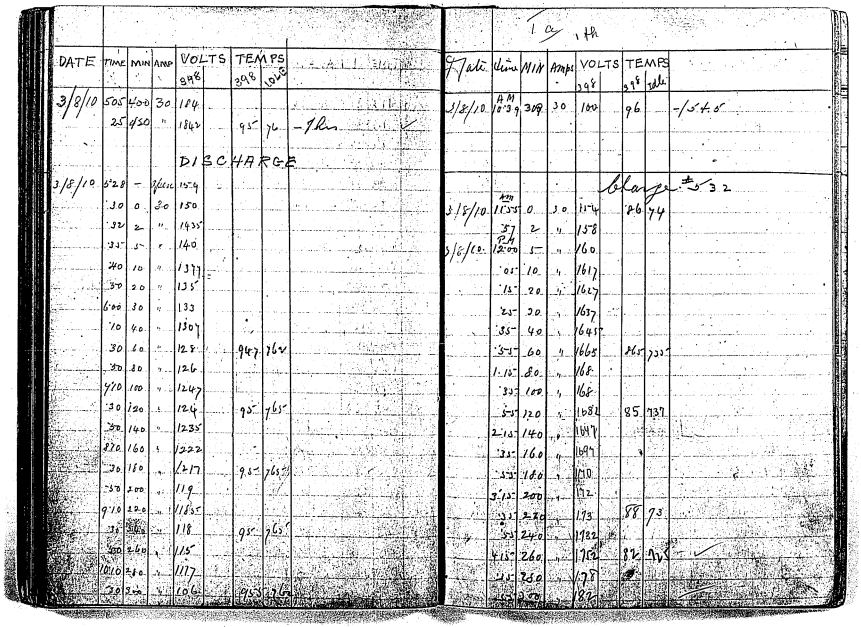
A

Date	TIME	MIN	AMP	VOLTS	TEMPS 398	TEMPS IDLE
3-7-10	5:50	400	30	1835		
	4:10	420	"	1822	855	695
3-9-10	7:00					
	4:15	—		1658		
	.15	0	30	148		
	.18	3	"	1405		
	.2	5	"	138		
	.21	10	"	136		
	.39	22	"	132		
	.45	30	"	1305		
	55	40	"	129		
	5:5	60	"	126		
	15	80	"	124	875	710
	55	100	"	1222		
	6:15	120	"	122		
	35	140	"	1205		
	55	160	"	118		
	7:15	180	"	119		
	35	200	"	118	91	
	55	220	"	1165		
	8:15	240	"	116		
	35	260	"	115	93	744
	55	280	"	115	94	
	9:05	290	"	100	94	

I a

I ?

Date	TIME	MIN	AMP	VOLTS 398	TEMPS 398	TEMPS IDLE
3/10	7:??			Change # 5/31		
	1825	0	30	149		
	29	2	"	150		
	30	5	"	1512		
	35	10	"	154		
	45	20	"	148		
	55	30	"	158		
	1105	40	"	156		
	25	60	"	1577	895	74
	45	80	"	1635		
	12.05	100	"	158		
	25	120	"	1605	877	747
	45	140	"	163		
	105	160	"	1637		
	25	180	"	162	895	75
	45	200	"	1637		
	2.05	220	"	162		
	25	240	"	1697	89	752
	45	260	"	1757		Miles changed
	305	280	"	1785		
	25	300	"	1815	90	757
	45	320	"	1822		
	405	340	"	1825		
	25	360	"	184	93	76
	45	380	"	1845		



DATE	TIME	MIN	AMP	VOLTS	TEMPS	
				398	398	1020
3/8/10	505	400	30	184		
	25	450	"	1862	95	76
				DISCHARGE		
3/8/10	5:28	—	30 Amps	154		
	30	0	30	150		
	32	2	"	1435		
	35	5	"	140		
	40	10	"	1377		
	50	20	"	135		
	6:00	30	"	133		
	10	40	"	1307		
	30	60	"	128	947	764
	50	80	"	126		
	7:10	100	"	1247		
	30	120	"	124	95	765
	50	140	"	1235		
	8:10	160	"	1222		
	30	180	"	1217	95	765
	50	200	"	119		
	9:10	220	"	1185		
	35	[illegible]	"	118	95	765
	10:00	240	"	115		
	10:10	250	"	1117		
	20	260	"	106	945	764

1 a 1 Pk

Date	Time	MIN	Amps	VOLTS	TEMPS		
				398	398	Table	
3/8/10	AM 10:39	309	30	100	96		-/5+.6
							charge
							532
3/8/10	11:35	0	30	1174	96	74	
	37	2	"	158			
3/6/10	PM 12:00	5	"	160			
	01	10	"	1617			
	15	20	"	1627			
	25	30	"	1637			
	35	40	"	1645			
	54	60	"	1665	965	733	
	1:15	80	"	168			
	35	100	"	168			
	55	120	"	1682	85	737	
	2:15	140	"	1687			
	35	160	"	169			
	55	160	"	170			
	3:15	200	"	172			
	35	220	"	173	88	73	
	55	240	"	1732			
	4:15	260	"	1742	87	745	
	35	280	"	175			
	[illegible]	[illegible]	"	177			

a

Date	TIME	MIN	AMP	VOLTS 398	TEMPS 398	IDLE	Remarks
3/8/10	PM 5	320	30	1842	845	725	
	30	340	"	185			
	58	360	"	185			
	6.15	380	"	186			
	35	400	"	185			
	55	420	"	185	90	742	-72
			"				
			"				
3-8-10	6 P.M.			Discharge			
	6.58	—	25 amp	160			
	7.00	0	30	150			
	02	2	"	143			
	05	5	"	1405			
	10	10	"	138			
	20	20	"	134			
	30	30	"	1325			
	40	40	"	1305			
	6.00	60	"	1282	92	745	
	20	80	"	1265			
	40	100	"	1245			
	9.00	120	"	124	93	75	
	20	140	"	1225			
	40	160	"	1222			
	10.00	180	"	121	94	75	
	20	200	"	1202			

1st Int

a

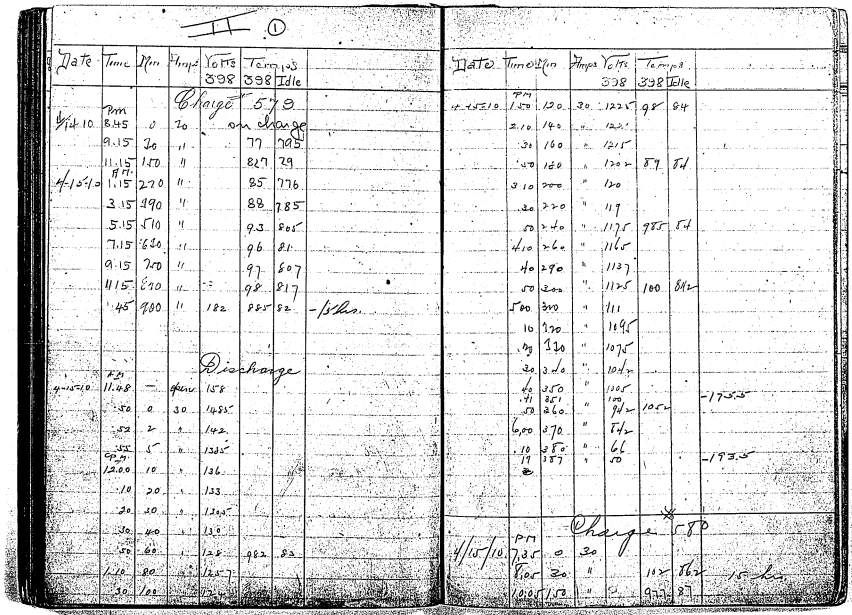
DATE	TIME	MIN	AMP	VOLTS 398	TEMPS 398	IDLE	
1/0/00	1040	220	30	1185			
	1100	240	"	1177	95	75	
	20	260	"	114			
	40	280	"	108			
	1 50	290	"	106			
3/9/10	12 00 AM	300	"	102	97	75	
	.06	306	"	100			-153
	.10	310	"	98			
	.20	320	"	93			
	.30	330	"	84			
	.40	340	"	69			
	.50	350	"	50	100	75	-175

3-9-10 P.M. Cells disconnected from Board after idle 3 hours.

3-10-10 P.M. Cycled on Endurance for 46 mins.

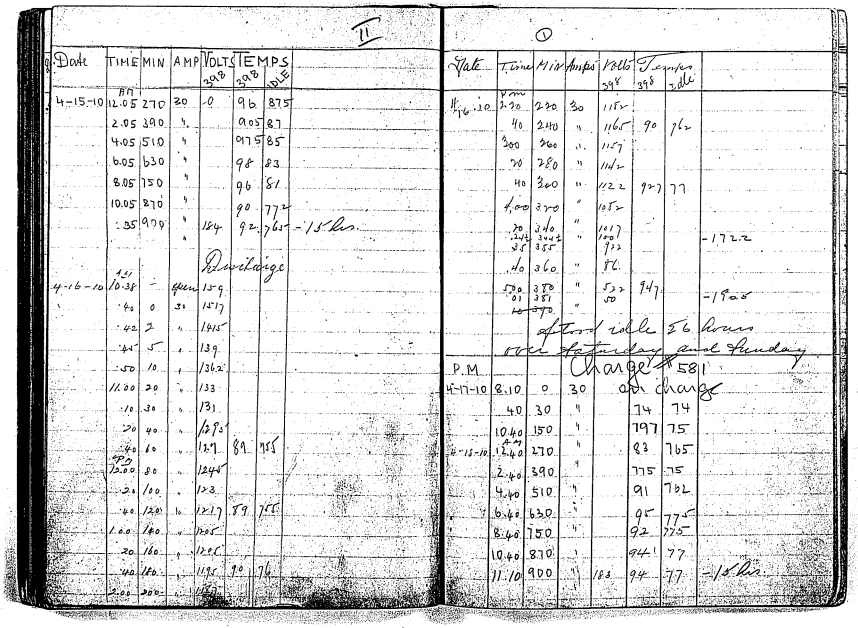
4-6-10 P.M. Disconnected from Endurance after idle 8 days 15 hours.

4-14-10 P.M. Connected on Board for over charge run.



Date	Time	Min	Amps	Volts 398	Temps 398	Temps Idle
				Charge 579		
9/14/10	pm 8.45	0	20	on charge		
	9.15	30	11		77	795
	11.15	150	11		829	79
9/15/10	am 1.15	270	11		85	776
	3.15	390	11		88	785
	5.15	510	11		93	805
	7.15	630	11		96	81
	9.15	750	11		97	807
	11.15	870	11		98	817
	1.45	980	11	182	885	82 - 15 lbs.
				Discharge		
9-15-10	PM 11.48	—	open	158		
	.50	0	30	1485		
	.52	2	"	142		
	.55	5	"	1385		
	12.00	10	"	136		
	.10	20	"	133		
	.20	30	"	1295		
	.30	40	"	130		
	.50	60	"	126	982	83
	1.10	80	"	125		
	.30	100	"	123		

Date	Time	Min	Amps	Volts 398	Temps 398	Temps Idle
9-15-10	PM 1.50	120	30	1225	95	84
	2.10	140	"	122		
	.30	160	"	1215		
	.50	180	"	1205	89	84
	3.10	200	"	120		
	.30	220	"	119		
	.50	240	"	1175	985	84
	4.10	260	"	1165		
	.40	280	"	1137		
	.50	300	"	1125	100	842
	5.00	310	"	111		
	.10	320	"	1095		
	.19	330	"	1075		
	.30	340	"	1045		
	.40	350	"	1005		
	.41	351	"	100		-175.5
	.50	360	"	94	105	
	6.00	370	"	84		
	.10	380	"	66		
	.19	389	"	50		-193.5
				Charge 580		
9/15/10	PM 7.35	0	30			
	8.05	30	"		107	862 - 15 lbs
	10.05	150	"		97	87



II

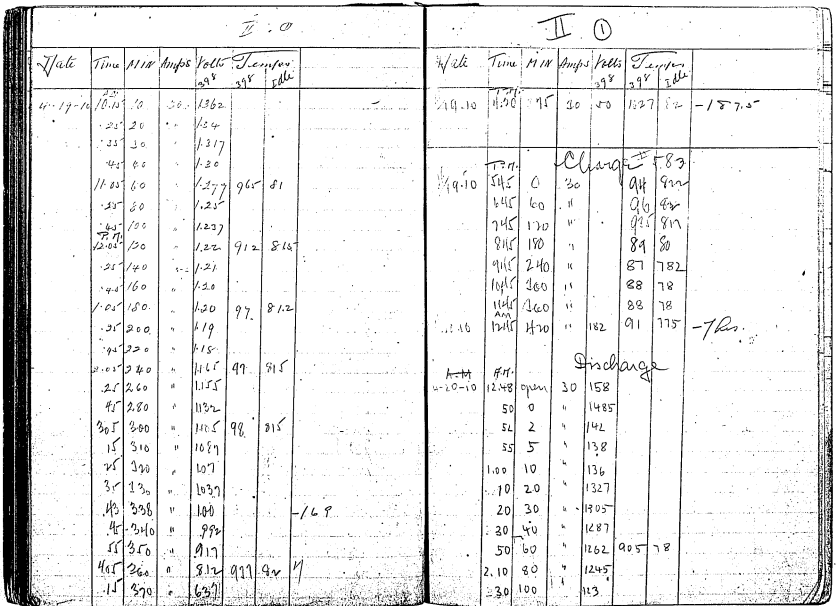
Date	TIME	MIN	AMP	VOLTS	TEMPS 398	398 DIFF	
	PM						
4-15-10	12.05	270	30	.0	96	87.5	
	2.05	390	"		90.5	87	
	4.05	510	"		91.5	85	
	6.05	630	"		98	83	
	8.05	750	"		96	81	
	10.05	870	"		90	77.5	
	12.35	900	"	154	92	76.5	-15 hrs.
				Discharge			
4-16-10	12:38		4 cells	15.9			
	12.40	0	30	15.17			
	12.42	2	"	14.15			
	12.47	5	"	13.9			
	12.50	10	"	13.62			
	1.00	20	"	13.3			
	1.10	30	"	13.1			
	1.20	40	"	12.95			
	1.40	60	"	12.7	89	75.5	
	2.00	80	"	12.48			
	2.20	100	"	12.3			
	2.40	120	"	12.17	89	75.5	
	3.00	140	"	12.05			
	3.20	160	"	12.0			
	3.40	180	"	11.95	90	76	
	4.00	200	"	11.9			

I

Date	Time	Min	Amps	Volts 398	Temps 398	Diff	
	PM						
4-16-10	2.20	220	30	11.85			
	2.40	240	"	11.65	90	76.5	
	3.00	260	"	11.57			
	3.20	280	"	11.45			
	3.40	300	"	11.22	92.5	77	
	4.00	320	"	10.85			
	4.20	340	"	10.57			-17.2.2
	4.35	355	"	10.22			
	4.40	360	"	8.6			
	5.30	370	"	5.32	74.5		-19.05
	5.31	371	"	5.32			
	5.50	370	"				
				after rest table 56 hours			
				clock stopped Saturday and Sunday			
P.M.				Charge # 581			
4-17-10	8.10	0	30	120 volt charge			
	8.40	30	"		74	74	
	10.40	150	"		79.5	75	
4-18-10	12.40	270	"		83	76.5	
	2.40	390	"		77.5	75	
	4.40	510	"		91	78.2	
	6.40	630	"		95	77.5	
	8.40	750	"		92	77.5	
	10.40	870	"		94.5	77	
	11.10	900	"	183	94	77	-15 hrs.

Date	Time	M/M	Amps	Volts 398	Temps 398	Temps Elec	
			Discharge				
4-15-10	11.15	—	Open	1585			
	.16	0	30	1465			
	.17	2	"	1420			
	.20	5	"	1382			
	.25	10	"	1361			
	.35	20	"	1335			
	.45	30	"	1312			
	.55	40	"	130			
	12.05	50	"	1317	935	78	
	.15	60	"	125			
	.25	70	"	123			
	.35	80	"	122	902	78	
	1.15	120	"	122			
	.35	140	"	121			
	.55	160	"	120			
	2.15	180	"	1192	905	77	
	.35	200	"	1185			
	.55	220	"	1175			
	3.15	240	"	1162	92	77	
	.35	260	"	115			
	.55	280	"	1132			
	4.15	300	"	1115	92	77	
	.35	320	"	1085			
	.45	330	"	1067			
	.55	340	"	107			

Date	Time	M/M	Amps	Volts 398	Temps 398	Temps Elec	
11/18/10	A.M. 11.51½	3.1½	30	100			-172.2
	5.05	3.30	"	97			
	.15	3.40	"	96	96	777	
	.25	3.50	"	95			
	.35	3.50	"	94			
	.41	3.56		50	97	75	-193
			Charge				* 58
11/18/10	7.00	0	30		90	78	
	.20	30	"		92	80	
	9.30	1.50	"		92	80	
	11.30 A.M.	3.70	"		91	81	
11/19/10	1.30	5.90	"		885	81	
	3.30	7.10	"		945	812	
	5.30	6.30	"		87	845	
	7.30	7.50	"		96	845	
	9.30	8.70	"		98	81	
	10.19	9.00	"	1237	99	81	-15 hrs.
			Discharge				
4-16	10.08	—	Open	1552			
	.05	0	30	1482			
	.07	2	"	1417			
	.10	5	"	1387			



I : 0

Date	Time	MIN	Amps	Volts	Temp 398	Temp Edit	
4-19-10	10:15	0	30	1362			
	.20	5	"	1324			
	.35	20	"	1317			
	.45	30	"	1.20			
	11:05	60	"	1.277	965	81	
	.35	90	"	1.25			
	.55	120	"	1.237			
	12:05 PM	130	"	1.22	912	846	
	.25	140	"	1.21			
	.45	160	"	1.20			
	1:05	180	"	1.20	97	812	
	.25	200	"	1.19			
	.45	220	"	1.18			
	2:05	240	"	1.16	99	815	
	.25	260	"	1.155			
	.45	280	"	1.132			
	3:05	300	"	1.115	98	815	
	.15	310	"	1.089			
	.25	320	"	1.07			
	.35	330	"	1.039			
	.45	338	"	1.00			-1.68
	.55	340	"	.988			
	.55	350	"	.917			
	4:05	360	"	.812	977	94	M
	.15	370	"	.697			

II (1)

Date	Time	MIN	Amps	Volts	Temp 398	Temp Edit	
4-19-10	11:00	95	30	80	1327	82	-1.87
				Charge		183	
4-19-10	5:45 PM	0	30		98	90	
	6:45	60	"		96	85	
	7:45	120	"		93	87	
	8:45	180	"		89	80	
	9:45	240	"		87	782	
	10:45	300	"		88	78	
	11:45	360	"		88	78	
	12:15 AM	390	"	182	91	775	-7.05
				Discharge			
4-20-10	12:48 PM	open	30	158			
		50	0	"	1485		
		52	2	"	142		
		55	5	"	138		
	1.00	10	"	"	136		
	.10	20	"	"	1327		
	20	30	"	"	1305		
	.30	40	"	"	1287		
	50	60	"	"	1262	905	78
	2.10	80	"	"	1245		
	.30	100	"	"	113		

II ①

Date	Time	M/M	Amps	Volts	Temp 398	Temp Idle	
4-20-10	A.M. 2.50	120	30	122	90?	78	
	3.10	140	"	1207			
	30	160	"	1205			
	50	180	"	120			
	4.10	200	"	119			
	30	220	"	118			
	50	240	"	1157	94	98	
	5.10	260	"	113			
	30	280	"	1065			
	40	290	"	1.02			
	43½	2930	"	1.00	95	78	-146.7
				Exchange	#5-84		
4-20-10	A.M. 6.15	0	30	1.573	93?	78	
	17	2	"	1.565			
	20	5	"	1.577			
	21	10	"	1.567			
	35	20	"	1.597			
	44	30	"	1.605			
	53	40	"	1.614			
	7.15	60	"	1.623	92	78	
	35	80	"	1.632			
	43	100	"	1.642			

Date	Time	M/M	Amps	Volts	Temp 398	Temp Idle	
4-20-10	A.M. 8.55	120	30	1.662	89	78	
	33	140	"	1.67			
	52	160	"	1.665			
	9.12	180	"	1.672	87	75?	
	31	200	"	1.68			
	52	220	"	1.70			
	10.13	240	"	1.712	85?	75	
	34	260	"	1.747			
	53	280	"	1.76			
	11.13	300	"	1.779	85	74.5	
	34	320	"	1.82			
	53	340	"	1.877			
	P.M. 12.13	360	"	1.817	88	74.5	
	34	380	"	1.837			
	53	400	"	1.853			
	1.13	420	"	1.84	90	75	-12.
				Discharge			
4-20-10	P.M. 1.18	—	4pcs	1.85			
	20	0	30	1.49			
	22	2	"	1.415			
	25	5	"	1.35			
	30	10	"	1.36			
	40	20	"	1.337			
	50	30	"	1.305			

II ①

Date	Time	Min	Amp	Volts	Temps 398	Temps Idle	
4/20/10	2:00	40	30	1.279			
	20	60	"	1.262	91	75	
	40	80	"	1.242			
	3:00	100	"	1.225			
	20	120	"	1.227	89	75	
	40	140	"	1.220			
	4:00	160	"	1.220			
	20	180	"	1195	905	755	
	40	200	"	118			
	5:00	220	"	117			
	20	240	"	1152	915	75	
	40	260	"	112			
	6:00	280	"	1081			
	10	290	"	1085			
	12½	294½		100	92	765	-14.2
				Charge	585		
4/30/10	11:00	0	30	1.676			
	.22	2	"	1.649			
	.25	5	"	1.602			
	.30	10	"	1.607			
	.40	20	"	162			
	.50	30	"	1621			

II ①

DATE	TIME	MIN	Amp	Volts	TEMPS 398	TEMPS Idle	
4/30/10	10:00	40	30	1642			
	20	60	"	1655	87	75	
	40	80	"	1662			
	11:00	100	"	167			
	20	120	"	1672	867	752	
	40	140	"	168			
	12:00	160	"	1682			
	20	180	"	1685	867	76	
	40	200	"	169			
	1:00	220	"	172			
	20	240	"	1707	875	76	
	40	260	"	1725			
5/1/10	12:00	280	"	1742			
	20	300	"	1775	89	762	
	40	320	"	1805			
	1:00	340	"	1817			
	20	360	"	1825	92	772	
	40	380	"	1822			
	2:00	400	(1675)	182	90	78	
	20	420	"	1831			-7 lb.
				Discharge			
4-21-10	2:23	—	open	1582			
	25	0	30	149			
	27	2	"	142			

II (1)

Date	Time	Min	Amp	Volts 39#	Temps 39#	Temps 10 LB
4-21-10	2.30	5	30	1305		
	35	10	"	137		
	4½	21½	"	1335		
	55	30	"	128		
	3.05	40	"	130		
	25	60	"	1275	937	78
	45	80	"	125		
	4.05	100	"	124		
	25	120	"	1227	935	
	45	140	"	122		
	5.05	160	"	1212		
	25	180	"	1205	94	78
	45	200	"	1192		
	6.05	220	"	1.185		
	25	240	"	1165	947	78
	45	260	"	1133		
1/	7.05	280	"	1.08		
	½	290	"	1.04		
	24	299	"	1.00	96	782 -149.5
				Change #586		
4-21-10	10					
4-21-10	820	0	30	1.54	91	784

II (1)

Date	Time	Min	Amps	Volts 39#	Temps 39#	Temps 10 LB
4-21-10	8.22	2	30	1.57		
	.23	3	"	1.577		
	.30	10	"	1.595		
	.40	20	"	1.60		
	.50	30	"	1.62		
	9.00	40	"	1622		
	.21	61	"	1637	912	787
	.60	80	"	1642		
	10.00	100	"	1645		
	.20	120	"	1652	90	79
	.40	140	"	166		
	11.00	160	"	1662		
	.20	180	"	167	89	79
	.40	200	"	1678		
	TP. 12.00	220	"	170		
	.20	240	"	170	90	797
	.40	260	"	1.72		
	1.00	280	"	1.742		
	.20	300	"	1.75	905	797
	.40	320	"	1.81		
	2.01	346	"	1.81		
	.20	360	"	1.81/2	932	80
	.40	380	"	1.81/2		
	3.00	400	"	1.81/2		
	.20	420	"	1.81/2	95	802 -7lb.

II ①

Date	Time	Min	Amp	Volts 39S	Temps 39S	Temps Idle	
			Discharge				
4/11/10	P.M. 3.40	~	open	1.057			
	45	0	30	1.185			
	47	2	"	1.145			
	50	5	"	1.095			
	55	10	"	1.067			
	4.05	20	"	1.034			
	15	30	"	1.015			
	4.05	40	"	130			
	55	60	"	1.099	935		
	5.05	80	"	1.252			
	5.05	100	"	1.235			
	25	120	"	1.226	92	785	
	45	140	"	122			
	6.05	160	"	1.207			
	25	180	"	1.192	915	775	
	45	200	"	1.187			
	7.05	220	"	118			
	25	240	"	1157	922	777	
	45	260	"	1122			
	8.05	280	"	107			
	15	290	"	102.5			
	25	300	"	100	945	78	-150
	35	310	"	942			
	45	320	"	89			

① · B III

DATE	TIME	MIN	AMP	VOLTS 39S	TEMPS 39S	TEMPS IDLE	
4-21-10	P.M. 4.55	330	30	1.37			
	9.05	340	"	69.5			
	15	350	"	50	97	78	-175
4-21-10	P.M. Cell disconnected from Trickle						
4-26-10	P.M. Started trickle 4 days. 18 hr. 45 min.						
5-21-10	P.M. Connected to Endurance for 46 mins.						
5-21-10	P.M. Disconnected from Endurance started trickle 3 days 6 hr.						
5-24-10	P.M. Connected to Board for the following runs.						
	P.M.			Charge # 63.3			
5/24/10	10.20	0	30	6th Charge			
	11.00 A.M.	30	"	86	725		
4/25	1.00	150	"	85	82		
	3.00	270	"	885	80		
	5.00	390	"	89	80		
	7.00	510	"	907	76		
	9.00	630	"	92	765		
	11.00 P.M.	750	"	940	78		
	1.00	870	"	967	792		
	.30	900	"	967	797		
	.30	900	"	1817			-15 hr.

T3 III ②

Date	Time	Min	Amps	Volts	Temp. 398	Temp. 298
				Discharge		
5/25/10	6pm 1.23	—	open			
	.25	0	30	1.573		
	.27	2	"	1.455		
	.40	5	"	1.365		
	.45	10	"	1.342		
	.55	20	"	1.322		
	2.05	30	"	1.30		
	.15	40	"	1.285		
	.35	60	"	1.262	95	807
	.55	80	"	1.257		
	3.15	100	"	1.217		
	.35	120	"	1.205	95	813
	.55	140	"	1.20		
	4.15	160	"	1.197		
	.35	180	"	1.18	95	825
	.53	200	"	1.175		
	5.15	220	"	1.16		
	.35	240	"	1.152	98	835
	.55	260	"	1.122		
	6.15	280	"	1.105		
	.35	300	"	1.075	101	822
	.45	310	"	1.045		
	.55	320	"	1007		
	.56	321	—	100		— 16 o.s.

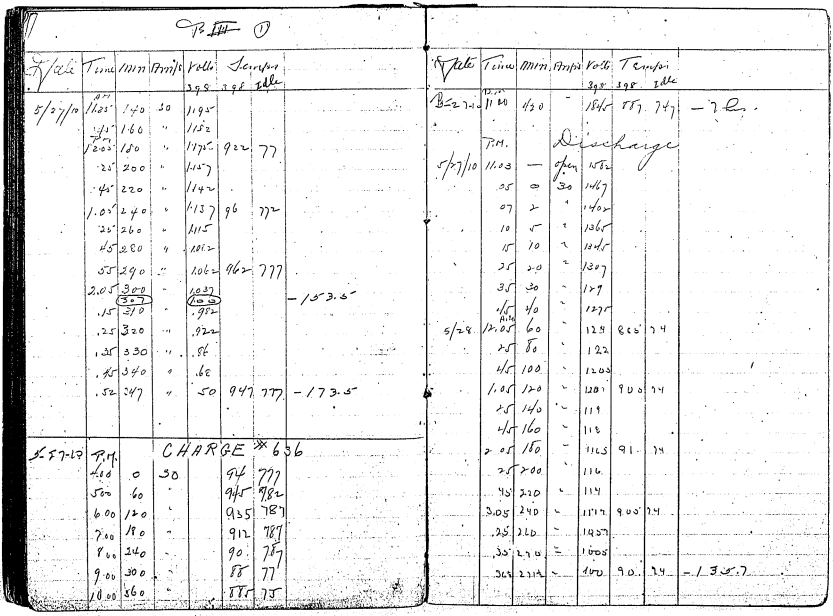
Date	Time P.M.	Min	Amps	Volts	T Degrees 398	T Degrees 298	REMARKS
5-25-10	7.05	330	30	96			
	.15	340	"	88			
	.25	350	"	765			
	.35	360	"	515	1035	82	
	.35	360	"	50			— 180 R
5-25-10	P.M.		Charge	634			
	8.10	0	30	On charge			
	40	30	"		95	812	
	10.40	150	"		93	815	
5/26/10	A.M. 12.40	270	"		94	81	
	2.40	390	"		95	807	
	4.40	510	"		91	81	
	6.40	630	"		94	81	
	8.40	750	"		98	805	
	10.40	870	"		98	805	
	11.10	900	"	182	98	805	— 15 R.
			— DISCHARGE —				
5/26/10	A.M. 11.13	OPEN	—	156	98	805	
	.15	0	30	145			
	.17	2	"	138			N.S
	.20	5	"	136			
	.25	10	"	134			

BII ①

DATE	TIME	MIN	AMPS	VOLTS 398	TEMPS 398	TEMPS IDLE	
5/26/10	11:35	20	30	1.32			
	45	30	"	1.297			
	55	40	"	1.28			
	PM 12:15	60	"	1.255	975	81	
	35	80	"	1.23			
	55	100	"	1.22			
	1:15	120	"	1.205	965	82	
	35	140	"	1.20			
	55	160	"	1.19			
	2:15	180	"	1.18	917	83	
	35	200	"	1.175			
	55	220	"	1.162			
	3:15	240	"	1.14	98	835	
	35	260	"	1.12			
	55	280	"	1.105			
	4:15	300	"	1062	103	84	54
	25	310	"	1017			
	30½	315½	"	100			-1-5-7.7
	35	320	"	977			
	45	330	"	90			
	55	340	"	77			
	5:05	350	"	605			
	5:08½	353½	"	50	975	845	-176.7

①

DATE	TIME	MIN	AMPS	VOLTS 398	TEMPS 398	TEMPS IDLE	
				Charge			163
5/26.10	PM 6:55	0	30	Open Charge			
	7:00	30	"		1022	845	
	8:30	120	"		95	82	
	10:30	270	"		95	82	
5/27.10	AM 12:30	390	"		945	82	
	2:30	510	"		95	815	
	4:30	630	"		96	805	
	6:30	750	"		94	792	
	8:30	870	"		96	777	
	9:00	900	"	1837	96	78	-1-5-R
				Discharge			
5/27/10	AM 9:53	—	Open	158			
	10:05	0	30	148			
	10:07	"	"	140			
	10:10	"	"	136			
	10:20	10	"	134			
	10:30	20	"	132			
	10:50	30	"	130			
	11:05	40	"	1277			
	11:20	60	"	1247	94	77	
	11:40	80	"	1225			
	12:00	100	"	1221			
	12:20	120	"	1.20	92	77	



Date | Time | mm | Amps | Volts 398 | Temp 398 | Temp Idle

5/27/10 | 11:25 AM | 140 | 30 | 1195
 | | 145 | 160 | " | 1152
 | | 12:00 PM | 180 | " | 1132 | 922 | 77
 | | :25 | 200 | " | 1157
 | | :45 | 220 | " | 1142
 | | 1:05 | 240 | " | 1137 | 96 | 77
 | | :25 | 260 | " | 1115
 | | :45 | 280 | " | 1082
 | | :55 | 290 | " | 1062 | 962 | 777
 | | 2:05 | 300 | " | 1037 | | | -1053-
 | | | 305 | | 1005
 | | :15 | 310 | " | 982
 | | :25 | 320 | " | 922
 | | :35 | 330 | " | 86
 | | :45 | 340 | " | 69
 | | :52 | 347 | " | 50 | 947 | 777 | -1735-

5/27/10 | P.M. | | | CHARGE | | | * 636
 | 4:00 | 0 | 30 | | 94 | 777
 | 5:00 | 60 | " | | 945 | 782
 | 6:00 | 120 | " | | 935 | 787
 | 7:00 | 180 | " | | 912 | 787
 | 8:00 | 240 | " | | 90 | 787
 | 9:00 | 300 | " | | 88 | 77
 | 10:00 | 360 | " | | 882 | 75

Date | Time | mm | Amps | Volts 398 | Temp 398 | Temp Idle

B-2746 | A.M. 11:00 | 420 | - | 1845 | 777 | 747 | -7 Rs.

P.M. Discharge

5/27/10 | 11:03 | — | open | 1852
 | :05 | ∞ | 30 | 1467
 | :07 | 2 | " | 1402
 | :10 | 5 | " | 1365
 | :15 | 10 | " | 1345
 | :25 | 20 | " | 1307
 | :35 | 30 | " | 1279
 | :45 | 40 | " | 1257
 | 12:05 AM | 60 | " | 1229 | 865 | 74
5/28 | :25 | 80 | " | 1222
 | :45 | 100 | " | 1203
 | 1:05 | 120 | " | 1201 | 908 | 74
 | :25 | 140 | " | 1191
 | :45 | 160 | " | 1178
 | 2:05 | 180 | " | 1163 | 91 | 74
 | :35 | 200 | " | 1146
 | :45 | 220 | " | 1134
 | 3:05 | 240 | " | 1117 | 905 | 74
 | :25 | 260 | " | 1097
 | :35 | 270 | " | 1085
 | :52 | 284 | " | 1070 | 90 | 74 | -1305-

B3 ①

DATE	TIME	MIN	AMPS	VOLTS	T	E	M	P	S
				396	398	1648			

Started voltage 5 days 5 hours run
Saturday Sunday Monday

	PM			Charge			
5-30-10	1:00	0	30	1567	78	78	
	10	2	"	1623			
	20	5	"	1671			
	30	10	"	1643			
5-31-10	1:00	30	"	1633			
	10	40	"	1663			
	20	50	"	1667			
	30	60	"	1632	82	770	
	40	70	"	1700			
	50	80	"	1708			
	2:00	90	"	1688			
	10	100	"	1665	842	775	
	20	110	"	1665			
	30	120	"	1672			
	40	130	"	1687	865	772	
	3:00	140	"	1677			
	20	150	"	1678			
	40	170	"	1845	88	772	
	4:00	180	"	1725			
	20	190	"	1777			
	40	210	"	1780			
	5:00	230	"	181			
	20	242	"	1.815			

DATE	TIME	MIN	AMPS	VOLTS	T	E	M	P	S
				392	398	1648			
5-31-10	AM 2:40	220	30	1.91	92	77			
	6:00	240	"	1.86					
	20	400	"	1.82					
	40	420	"	1.824	942	774	-7		
				Discharge					
5-31-10	AM 6:42	—	Open	1.58					
	45	0	30	1.48					
	47	2	"	1.40					
	50	5	"	1.352					
	55	10	"	1.367					
	7:05	20	"	1.32					
	15	30	"	1.29					
	25	40	"	1.26					
	45	60	"	1.25	925	77			
	8:05	80	"	1.235					
	25	100	"	1.215					
	45	120	"	1.202	92	765			
	9:05	140	"	1.187					
	25	160	"	1.184					
	45	180	"	1.177	92	76			
	10:05	200	"	1.16					
	25	220	"	1.147					
	45	240	"	1.12	922	757			
	11:05	260	"	107					

CT33 ①

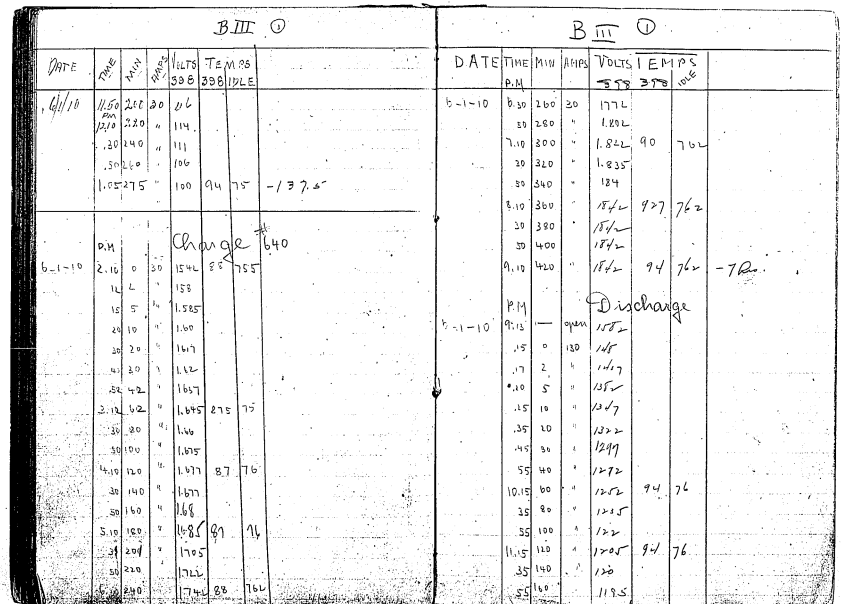
Date	Time	Min	Amps	Volts	T emp 398	T emp 398	T emp diff
5/21/10	AM 11 45	270	30	1022			
DH HW	12 15	300	"	100	95	75	-140
				Discharge # 628			
5/21/10	PM 12 45	0	30	1.58	887	745	
	47	2	"	1.595			
	50	5	"	1.60			
	55	10	"	1.602			
	1.05	20	"	1.62			
	1.15	30	"	1.603			
	1.25	40	"	1.622			
	1.45	60	"	1.65	905	75	
	2.05	80	"	1.66			
	1.24	100	"	1.672			
	1.40	120	"	1.65	89	75	
	3.05	140	"	1.679			
	1.25	160	"	1.68			
	1.40	180	"	1.681	89	75	
	4.05	200	"	1.70			
	1.25	220	"	1.719			
	1.45	240	"	1.737	875	745	
	5.05	260	"	1.762			
	1.25	280	"	1.802			

Date	Time	Min	Amps	Volts	T emp 398	T emp 398	T emp diff
5/21/10	1145	300	30	1822	90	75	
	1201	320	"	1.855			
	15	340	"	1.84			
	45	360	"	1.841	922	752	
	115	380	"	1835			
	25	400	"	1.837			
	115	420	"	184	93	752	-70.
	P.M			Discharge			
5-21-10	7.48	—	open	1.58			
	50	0	30	1.467			
	51	2	"	1.41			
	55	5	"	1.367			
	8.00	10	"	1.315			
	10	20	"	1.307			
	20	30	"	1.287			
	30	40	"	1.282			
	50	60	"	1.25	92	757	
	9.10	80	"	1227			
	30	100	"	122			
	50	120	"	1205	902	757	
	10.10	140	"	120			
	30	160	"	1185			
	50	180	"	118	93	757	
	11.10	200	"	1162			

B III D

Date	Time P.M.	Min	Amp	Volts 398	Temp. 398	Temp. Tube	
5/31/10	11.30	220	30	1145			
	11.50	240	"	112	915	757	
6/1/10	12.10 A.M.	260	"	1057			
	.20	270	"	100	935	757	-1.35
			"				
	A.M.			Charge	639		To 1.1V
6/1/10	1.25	0	30	1184	90	757	
	27	2	"	1175			
	30	5	"	168			
	35	10	"	160			
	45	20	"	1605			
	55	30	"	162			
	2.05	40	"	1635			
	25	60	"	165	90	755	
	45	80	"	166			
	3.05	100	"	1665			
	25	120	"	1665			
	45	140	"	1675	88	754	
	4.05	160	"	168			
	25	180	"	1685			
	45	200	"	1705			
	5.05	220	"	172			
	25	240	"	174	852	75	
	45	260	"	177			

Date	Time A.M.	Min	Amp	Volts 398	Temp. 398	Temp. Tube	
6/1/10	6.05	280	30	180			
	.25	300	"	182	90	75	
	.45	320	"	183			
	7.05	340	"	1837			
	.25	360	"	184	98	75	
	.45	380	"	1835			
	8.05	400	"	184			
	.25	420	"	184			-7R
				Discharge			
6/1/10	8.38 A.M.	—	open	158	895	74	
	.30	0	30	148			
	.32	2	"	1407			
	.35	5	"	1377			
	.40	10	"	1347			
	.50	20	"	1317			
	9.00	30	"	1295			
	.10	40	"	1277			
	.30	60	"	1247	87	72	
	.50	80	"	1222			1V
	10.10	100	"	1201			
	.20	120	"	1200	877	73	
	.50	140	"	1197			
	11.10	160	"	1182			
	.30	180	"	1177	91	74	



B III ①

DATE	TIME	MIN	AMPS	VOLTS 338	TEMPS 338	TEMPS IDLE	
6/1/10	11:50 AM	210	30	176			
	12:10 PM	220	"	114			
	.30	240	"	111			
	.50	260	"	106			
	1:05	275	"	100	94	75	-137.5
				Charge #640			
	P.M						
6-1-10	2.10	0	30	1542	88	755	
	12	2	"	158			
	15	5	"	1.585			
	20	10	"	1.60			
	25	20	"	1617			
	42	30	"	1.62			
	.52	42	"	1657			
	3.12	62	"	1.645	875	75	
	30	80	"	1.66			
	50	100	"	1.655			
	4.10	120	"	1.677	87	76	
	30	140	"	1.677			
	50	160	"	1.68	91	76	
	5.10	180	"	1.685			
	31	201	"	1705			
	50	220	"	1722			
		240		1742	88	761	

B III ①

DATE	TIME P.M	MIN	AMPS	VOLTS 338	TEMPS 338	TEMPS IDLE	
6-1-10	6.30	260	30	1776			
	50	280	"	1.802			
	7.10	300	"	1.822	90	762	
	30	320	"	1.835			
	50	340	"	184			
	8.10	360	"	184	927	762	
	30	380	"	184			
	50	400	"	184			
	9.10	420	"	184	94	762	-72.
				Discharge			
	P.M						
6-1-10	9.15	—	open	188			
	25	0	130	148			
	27	2	"	1417			
	30	5	"	135			
	35	10	"	1317			
	45	20	"	1322			
	55	30	"	1297			
	10.15	40	"	1272			
	35	60	"	1252	94	76	
	55	80	"	1235			
	11.15	100	"	1222			
	35	120	"	1205	94	76	
	55	140	"	1190			
		160		1195			

RIII ①

Date	Time P.M.	Min	Amps	Volts 398	Temps 395	Temps Idle	
6/2/10	12.15	180	30	1177	93	765	
	.30	200	"	116			
	.45	220	"	1145			
	1.15	240	"	1117	962	765	
	.35	260	"	1055			
	.45	270	"	1007			
	.55	280	"	100 / 965			- 13 Sw. off
	2.05	290	"	905			
	.15	300	"	84	967	765	
	.25	310	"	74			
	.35	320	"	592			
	.40	325	"	50	97	765	- 16 Sw. off
6-2-10	3.45	Disconnected from Tower and Temp idle indefinitely					
	2.30	-					

A4 #398.

Run	Charge	Dis.	Ampere-Hours I.V.	Ampere-Hours S.V.	Remarks
.	See Runs* 1 – 165 in Vols. I and II.				
166	7 hrs. @ 30	Od 40	153.3	183.7	
167	"	"	152	184.3	
168	"	"	153.3	186.3	
169	"	"	133.3	170.7	
170	"	"	153.3	184.7	
171	"	"	153.3	186.3	
172	"	"	153.3	185.3	
173	"	"	153.3	187.3	
174	"	"	154.7	186.7	
175	"	"	150	184	
176	"	"	146.7	183.3	
177	"	"	152	184.3	
178	"	"	155.7	185.3	
179	"	"	149.6	182.3	
180	"	"	129.3	163.3	Steel changed
181	"	"	152	182.3	
182	"	"	152	183.7	
183	"	"	155.3	184.7	
184	"	"	153.3	183	
185	"	"	152	182	
186	"	"	156.3	185	
187	"	"	153	182.7	
188	"	"	153.3	182.7	
189	"	"	154	183	

Run	Charge	Dis.	Ampere-Hours I.V.	Ampere-Hours S.V.	Remarks
190	7 hrs. @ 30	Od 40	153.3	182	
191	"	"	137.3	170	Steel changed. (Applies 50 runs)
192	15 hrs @ 30	Od 30	194.5	220	
193	"	"	202	225.5	
194	"	"	205	227.5	
196	7 hrs @ 30	Od 40	158.7	168	
197	"	"	163.3	176.3	
198	"	"	165	180.7	
199	"	"	146.7	166.3	Steel changed
200	"	"	162	177.7	
201	"	"	165.3	183.3	
217	7 hrs. @ 30	Od 40	151.3	178.3	
218	"	"	154	180	
219	"	"	130	165.7	Steel changed
220	"	"	146.7	176	
221	"	"	153.3	180	
222	"	"	151.7	177.3	
239	7 hrs. @ 30	Od 40	148	168	
240	"	"	154.7	175	
241	"	"	125.3	153	Steel changed
242	"	"	147.7	170.7	
243	"	"	150	169.7	
244	"	"	149.3	169.3	(50 Ind. runs)

Run	Charge	Dis.	*398 iV.	*398 sV.	Remarks
245	15 hrs. @ 30	Oct 30	192.5	210.7	
246	"	"	185	204.7	
247	"	"	195	204.5	
248	7 hrs. @ 30	"	163.5	—	
249	"	"	166.5	—	
250	"	"	165.5	—	
	Removed electrolyte and anolyte cell free of sediment with 21 o/o KOH; then put in 21 o/o KOH + 30 g. LiOH per liter.				
251	15 hrs. @ 30	Oct 30.	195	219.5	
252	"	"	198	215.7	
253	"	"	199.2	215.5	
254	7 hrs. @ 30	"	163.5	—	
255	"	"	170.5	—	
256	"	"	174	—	
257	"	"	179.5	199.5	
258	"	Oct 40	161.3	176.7	
259	"	"	165.3	183.3	
260	"	"	162.3	181.7	
261	"	"	166.7	180.7	
262	"	"	161	180.3	
278	"	"	149.7	166	
279	"	"	130	153.7	Stood chg'd
290	"	"	144.7	164.7	
291	"	"	150.7	170	
292	"	"	151	170.7	(Trip End running)

Run	Charge	Dis.	*398 iV.	*398 sV.	Remarks
293	15 hrs. @ 30	Oct 30	191.7	212.5	
294	"	"	188.5	210.5	
295	"	"	188	210.5	
296	7 hrs. @ 30	"	159.2	—	
297	"	"	147.7	—	
298	"	"	146.	—	
299	"	Oct 40	164.7	184	
290	"	"	153.3	181.7	
291	"	"	155.3	181.3	
292	"	"	148	167	
293	"	"	153.3	173.3	
302	"	"	144.7	165.7	
303	"	"	150	170.7	
304	"	"	143.7	163.7	
305	"	"	144	165.3	
306	"	"	143.3	164.3	(21 C.S.)
307	15 hrs. @ 30	Oct 30	176.7	194	
308	"	"	181.7	205.5	Pour cells
309	"	"	180.7	202.7	
310	7 hrs. @ 30	"	156.5	—	
311	"	"	159.5	—	
312	"	"	158	187	
313	"	Oct 40	153.3	180	
314	"	"	151.3	175.3	
315	"	"	148	170.3	

RUN	CHARGE	DIS.	398 IV.	398 SV.	REMARKS
316	7 hrs @ 30	Oct 40	139.3	155	Stood Night each
317	"	"	148	171.3	
332	"	"	138.7	160.7	
333	"	"	145.3	166.3	
334	"	"	146	166	
335	"	"	146.7	165.7	
336	"	"	132.5	161.7	Stood Night of 36 hr.
355	"	"	142	160	
356	"	"	146.7	164.7	
357	"	"	141.3	160	
358	"	"	132	154.7	Stood Night 36 hr.
359	"	"	140	159.3	
360	15 hrs @ 30	Oct 30	174	197	
361	"	"	171.5	191	
362	"	"	175.5	193	Pour. Nile
363	7 hrs @ 30	"	146.5	—	
364	"	"	150	—	
365	"	"	146.5	171.5	
366	"	Oct 40	151.3	172.3	
367	"	"	130.	152.7	Stood Night
368	"	"	146.7	166.7	
369	"	"	146.7	170.	
370	"	"	141.3	160.	
408	"	"	143.3	162.	
409	"	"	139.3	155.7	

RUN	CHARGE	DIS	398 IV.	398 SV.	REMARKS
410	7 hrs @ 30	Oct 40	140.	156.7	
411	"	"	140.7	157.	
412	"	"	135.3	150.7	50 C.R.
413	15 hrs @ 30	Oct 30	170.	189.5	
414	"	"	177.5	195.5	
415	"	"	175.5	193.	
416	7 hrs @ 30	"	147.5	—	
417	"	"	149.2	—	
418	"	"	149.5	—	
419	"	"	154.7	175	
	Put in 2.1% KOH + 11.2 g $Ba(OH)_2$ per liter.				
420	15 hrs @ 30	Oct 30	197.7	204	
421	"	"	178.	194.7	
422	"	"	174.	195.7	
423	7 hrs @ 30	"	150	—	
424	"	"	154.5	—	(10 min. overlight)
425	"	"	153.2	177.5	
426	"	@ 40	152	175	
427	"	"	138.3	157.3	
428	"	"	140	156.7	
429	"	"	141.7	163.3	
430	"	"	134.7	161.3	
468	"	"	133.3	153.3	
469	"	"	137.3	159.3	
470	"	"	133.3	148.7	

Run	Change	Mls	3rd R.		
			1/.	5/.	
471	7 Run @ 3 @ 4		137.3	153.3	
472	"	"	133.3	148.7	
473	6 Run @ 3 @ 30		177.5	195	Trev. Idle
474	"	"	177	197	
475	"	"	175	191.5	
476	7 Run @ 30	"	150.5	—	
477	"	"	153.5	—	
478	"	"	151.5	—	
479	"	"	152	176.5	
480	"	"	132	152	
481	"	"	133.3	153.3	
482	"	"	133.3	151	
483	"	"	138	153.3	
484	"	"	133.3	149	
521	"	"	131	144.7	
522	"	"	134.7	147.7	
523	"	"	129.7	145	Trev. Idle
524	"	"	—	—	Tank Run
525	"	"	134	148.3	
526	5 Run @ 30 @ 30		170	188.5	
527	"	"	178	196	- 8 min. Overchange
528	"	"	175.7	192	
529	7 Run @ 30	"	144.7	—	Trev. Idle
530	"	"	144	—	
531	"	"	154.5	—	

Run	Change	Mls	3rd R.		Remarks
			1/.	5/.	
532	7 Run @ 30 @ 30		153	173.5	
533	"	" @ 40	128	147.3	
534	"	"	126.7	146	
535	"	"	127.3	147	
536	"	"	132.3	155.3	
576	"	"	140.7	157.7	
576	"	"	140	160	
577	"	"	142.7	158.3	
578	"	"	140	160	
579	15 Run @ 30 @ 30		175.5	193.5	Trev. Idle
580	"	"	172.2	190.5	
581	"	"	172.2	193	Trev. Idle
582	"	"	169	187.5	
583	7 Run	"	146.7	—	
584	"	"	146.2	—	
585	"	"	148.5	—	(T.O.S. to Run)
586	"	"	150	172.5	
587	"	" @ 40	138	162	Trev. Idle
588	"	"	140	155	
589	"	"	138.7	156.7	
590	"	"	138	158.3	
619	"	"	134.7	153.3	
630	"	"	134.7	152.3	
631	"	"	133.3	152.7	
632	"	"	134.7	151.7	

Analysis by Goldstein of the Electrolyte Removed from A4 #398 7/12/09, after 250 Runs.

Electrolyte put in originally was 21% KOH + 120 g. SiOH per cell.

Specific Gravity 1.1165 at 15°C.

Direct Determinations:

Total Alkalinity as KOH	17.920 %
KOH	14.960 "
SiOH	1.350 "
CO_2	0.475 "
SO_3	0.1630 "
HCl	0.0075 "

Calculated:

K_2CO_3	2.110 %
K_2SO_4	0.350 "
KCl	0.015 "

Sediment (removed by rinsing):

Total weight 42.852 g.

Contains Hg, Hg_2O, NiO, Ni_2O_3, and Fe_2O_3. Also Li, Na, + Ca on the Hg as amalgams.

Hg constitutes about one-half the total weight of sediment.

RUN	CHARGE	H.T.	3.7.8 16. 5%	
633	1KB@3.0	@3.0	16.5%	Top of Tube
634	"	"	27.7%	26.7%
✓635	"	"	53.5%	173.5%
636	7lb.	"	35.1%	—
637	"	"	40	— Top of Tube
638	"	"	35%	—
639	"	"	37.5%	—
✓640	"	"	35.7%	62.5%

For further runs see Vol IV